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Stockpile and Post-Remedial
Excavation Confirmation Report
Parcel A, Report No. 8

Boeing Realty Corporation C-6 Facility
Los Angeles, California

March 1998



MONTGOMERY WATSON

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PARCEL A
REPORT NO. 8**

**BOEING REALTY CORPORATION C-6 FACILITY
LOS ANGELES, CALIFORNIA**

March 1998

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SECTION 1.0

INTRODUCTION

In October 1996, Montgomery Watson (Montgomery) was retained by McDonnell Douglas Realty Company, now the Boeing Realty Corporation (BRC), to assist with the redevelopment of Parcel A (the Site) of their C-6 Facility located in Los Angeles, California. Figure 1 presents the C-6 Facility. Figure 2 delineates the Site. The Site was formerly used to manufacture and store aircraft parts.

1.1 OVERVIEW

The Site consists of the northernmost quarter of the C-6 Facility, encompassing approximately 50 acres. Demolition of the following buildings has occurred: Building 29, 33, 34, 36, 37, 40, 41, 43/44, 45, 57, 58, 61, 66-A, and 67.

Information gathered during the data compilation and evaluation phase of this project indicated the presence of petroleum products and other chemicals of concern in the surface and subsurface.

A soil sampling and remedial excavation effort was conducted in conjunction with the removal of foundations, slabs, and below-ground structures. The purpose of this effort was to assess soil quality and remove soil affected with petroleum hydrocarbons and other chemicals of concern in preparation for redevelopment of the Site. Soil which was determined to be affected with petroleum hydrocarbons and other chemicals was excavated and stockpiled at the Site. Confirmation samples were collected along the walls and floor of each remedial excavation to confirm that the surface soil (upper 12 feet) met soil screening criteria at sample locations.

Stockpiled soil and confirmation samples discussed in this report were generated from four remedial excavations conducted at four different locations at the Site.

1.2 PURPOSE AND OBJECTIVES

The lead agency for this project is the Los Angeles Regional Water Quality Control Board (RWQCB). The process of screening excavated soil and confirming *in situ* soil quality as presented in this document has been approved by the RWQCB. Following the initial review and implementation of this process, the RWQCB has allowed BRC to undertake excavation and backfilling operations without intermittent agency review. All BRC decisions based upon the approved soil screening process are documented for final agency review and approval. This approach was developed to expedite the soil quality evaluation process, and this report has been prepared to document the process used by BRC to evaluate excavated and residual soil at Site locations discussed herein.

Specifically, the purpose and objectives of this report are:

- 1) To document the quality of the stockpiled soil generated from remedial excavations according to the Facility-wide soil screening criteria, and the process by which the stockpiled soils were divided into two categories: (a) soils requiring treatment or off-site disposal, and (b) soils suitable for use as construction backfill at the Site.
- 2) To document that surface soil (upper 12 feet) in each remedial excavation meets the established soil screening criteria.

SECTION 2.0

REMEDIAL EXCAVATIONS

Four remedial excavations were conducted at four different locations. A description of each remedial excavation location is presented below in the order in which excavation activities occurred.

Hazardous Materials Storage Pad

The hazardous materials storage pad, formally located between Building 29 and Building 1 and south of Building 61, was used as a hazardous waste accumulation area. During initial field efforts, the concrete pad was not readily identified as the hazardous materials storage pad and, for convenience, was referred to as "Building A". A remedial excavation was conducted when affected soil was discovered during the removal of the concrete pad. This remedial excavation was recorded using the following nomenclature:

"Building A" (BA) - Remedial Excavation (RE) - Chronological Number (#)
e.g., BA-RE-1

Building 36

Building 36 was formally used as a paint and solvent storage area. A remedial excavation was conducted based on historical data indicating the presence of affected soil within the Building 36 footprint. This remedial excavation was recorded using the following nomenclature:

Building Number (B#) - Remedial Excavation (RE) - Chronological Number (#)
e.g., B36-RE-1

Building 37 East Clarifiers

During Site demolition efforts, three underground concrete structures east of the Building 37 footprint were excavated. Two of the structures (C1 and C3) were identified as oil/water separators and the third structure (C2) appeared to be a sump. The three concrete structures were collectively referred to as the Building 37 East Clarifiers.

Soil that was present inside C1 and C2 was referred to as "fill soil" and was removed. A remedial excavation was conducted when affected soil was discovered during the removal of the three concrete structures. This remedial excavation was recorded using the following nomenclature:

Building 37 East Clarifiers (B37CL) - Remedial Excavation (RE) - Chronological Number (#)

e.g., B37CL-RE-1

Pipeline west of Building 43/44

The water tanks located at the former Building 43/44 area in the northeast corner of Site (see Figure 2) were historically used to store diesel fuel oil which was pumped into Building 41 via a network of buried pipelines. A remedial excavation was conducted when affected soil was discovered during the removal of the pipeline west of Building 43/44. This remedial excavation was recorded using the following nomenclature:

Pipeline (PL) - Remedial Excavation (RE) - Chronological Number (#)

e.g., PL-RE-1

The location of each remedial excavation discussed in this report is presented in Figure 3. The 20-foot by 20-foot grid used to reference previous Building 37 remedial excavations was extended to the locations of remedial excavations B36-RE-1, B37CL-RE-1, and PL-RE-1 for the same purpose. Remedial excavation BA-RE-1 was performed using a grid layout unique to that excavation (as indicated in Figure 11).

Pertinent information related to the remedial excavations and the associated excavated soil discussed in this report is presented below.

Excavation	Approximate Volume	Date of Excavation	Excavated Soil Location
BA-RE-1	697 cu yds total	14 Aug 97 — 15 Aug 97	West of Building 34.
B36-RE-1	2,143 cu yds total	25 Aug 97 — 9 Sept 97	West of Site access road.
Fill Soil/B37CL-RE-1	1,685 cu yds total	18 Sept 97 — 15 Dec 97	West of Site access road.
PL-RE-1	1,700 cu yds	11 Dec 97	East of Building 37.

2.1 SOIL SAMPLING

Hot spot sampling and confirmation sampling have been employed at the remedial excavations discussed in this report. Detailed procedures for these activities are outlined in the *Sampling and Analysis Plan for Demolition Activities at the Douglas Aircraft Company C-6 Facility* prepared by Integrated Environmental Services, Inc. (IESI, 1997(a)) which has been reviewed and approved by the RWQCB. In addition, stockpile and land treatment sampling was performed on the excavated material. These procedures can be summarized as follows:

2.1.1 Hot Spot Sampling

Hot spot sampling was conducted at predetermined locations where former items of concern were located, and at other locations where demolition activities revealed soil which may have been affected by petroleum hydrocarbons or other chemicals of concern.

Hot spot samples were collected by first exposing “fresh” soil beneath the surface using a stainless steel utensil or similar device. A photoionization detector (PID) was used to measure headspace organic vapor concentrations in the freshly exposed soil at each location. Soil samples were collected for analysis where at least one of the following conditions existed: 1) the headspace volatile organic compound (VOC) reading exceeded 5 ppm, (2) areas where staining of the soil was visible, or (3) areas where odors were noticeable.

Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet or drive sampler. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps. A unique sample identification using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve:

Building No. (B#) - Grab Sample (GS) - Chronological Number (#) - Sample Depth (feet)
e.g., BA-GS-1-1.5'

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis. Hot spot samples have been analyzed according to the analytical schedule presented in Table 1.

Hot spot sample locations discussed in this report have been subsequently excavated and data collected from these samples are considered representative of the corresponding stockpile soil quality.

2.1.2 Stockpile and Land Treatment Unit Sampling

Stockpiles

Excavated soil was placed in stockpiles each consisting of approximately 250 cubic yards of soil. Generally, stockpile samples were collected at a frequency of approximately one sample per stockpile. Stockpile samples were collected from the most noticeably affected soil within the stockpile. Samples were collected by using a shovel to cut vertically into the side of a stockpile at each sample location to expose “fresh” soil; samples were then collected from the exposed vertical wall and headspace VOC concentrations were measured using the PID.

Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet or drive sampler. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps. A unique sample identification

using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve:

Building No. (B#) - Remedial Excavation No.(RE#) - Stockpile Chronological Number (SP#)

e.g., B36-RE1-SP1

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis.

Stockpile samples have been analyzed according to the analytical schedule presented in Table 1.

Land Treatment Units

In a letter to IESI from the RWQCB dated October 24, 1997, the RWQCB approved submittals from BRC to remediate on-site and reuse VOC-impacted soil from Building 36 and Building A. Consequently, some stockpiles were combined and knocked down to create Land Treatment Units, bypassing the stockpile sampling process.

Soil in the Land Treatment Units was turned and aerated using a bulldozer and other heavy equipment. Headspace readings were collected periodically from the Land Treatment Units using a PID. Generally, soil samples were collected for analysis when PID readings were less than 5 ppm.

Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet or drive sampler. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps. A unique sample identification using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve:

Building No. (B#) - Land Treatment Unit Number (LTU-#) - Grab Sample (GS) - Chronological Number (#)

e.g., BA-LTU-1-GS-1

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis.

Land Treatment Unit samples have been analyzed according to the analytical schedule presented in Table 1.

2.1.3 Confirmation Sampling

Confirmation sampling was conducted to ensure that residual surface soil (upper 12 feet) met soil screening criteria at each excavation. Confirmation sampling was conducted along the walls and floor of each excavation.

Generally, soil removal continued at a particular location until the following conditions were met: 1) the headspace VOC reading in freshly exposed soil was less than or equal to 5 ppm, and soil staining was not visible, and odors were not noticeable, or 2) the maximum excavation depth of 12 feet had been reached. A confirmation sample was collected when these conditions were met. Iterations of additional soil excavation were conducted as required until confirmation sample analytical data indicated that *in situ* soil quality met the soil screening criteria established in Section 3.1 of this report, or the maximum excavation depth of 12 feet had been reached.

Confirmation soil samples were collected by first exposing "fresh" soil beneath the surface of a wall and floor of an excavation using a stainless steel utensil or similar device. Soil samples were collected for analysis in pre-cleaned, stainless steel sleeves by driving the sleeve into the soil with a rubber mallet or drive sampler. The ends of the sleeves were then covered with Teflon film and secured with plastic end caps. A unique sample identification using the following nomenclature was written in indelible ink on a sample label and attached to the sleeve:

Building No. (B#) - Grab Sample (GS) - Chronological Number (#) - Sample Depth (feet)
e.g., B36-GS-8-12'

Sample sleeves were placed in a cooler with blue ice and transported under chain-of-custody to a State-certified laboratory for analysis. Confirmation samples have been analyzed according to the analytical schedule presented in Table 1; however, some confirmation sample analyses were limited to target-specific chemicals once such analytes were identified either through previous sampling activities or historical site knowledge.

2.2 SOIL EXCAVATION

Remedial excavation to remove affected soil was conducted when one of the following conditions was discovered: (1) elevated PID readings greater than 5 ppm in hot spot samples, (2) visible staining, and (3) noticeable odors.

Remedial excavations were performed using heavy equipment (excavators, front-end loaders, end-dump trucks) associated with the building demolition effort. Air monitoring in accordance with South Coast Air Quality Management District Rule 1166 was conducted throughout remedial excavation activities.

The maximum depth of any excavation was approximately 12 feet below grade. Excavated soil was segregated based on the location from where it was removed. Soil stockpiles or Land Treatment Units were placed on asphalt or plastic sheeting. The locations of each stockpile and Land Treatment Unit are presented in Figures 4 through 10.

2.3 STOCKPILE AND LAND TREATMENT UNIT SOIL QUALITY

Four remedial excavations were conducted at four different locations when affected soil was discovered during the demolition process.

2.3.1 BA-RE-1 Excavated Soil

Soil removal at remedial excavation BA-RE-1 began on August 14, 1997 and was completed on August 15, 1997.

Approximately 697 cubic yards of soil associated with this excavation was removed with an excavator, transported and stockpiled west of the Building 34 footprint as presented in Figure 4 (Stockpiles A, B, and C). Land Treatment Unit BA-LTU-1 was subsequently created from Stockpile C, and Land Treatment Unit BA-LTU-2 was subsequently created from Stockpiles A and B as presented in Figure 5.

The following types of samples have been collected and analyzed to evaluate the soil quality in BA-RE-1 excavated soil:

- Excavated hot spot sample
- Stockpile samples
- Land Treatment Unit samples

One hot spot sample was collected at the location presented in Figure 11; the area around this location was later excavated. The analytical data for this sample are summarized in Table 2.

Four stockpile samples were collected. The locations of these samples are presented in Figure 4. Analytical data for these samples are summarized in Table 3.

Two Land Treatment Unit samples were collected. The locations of these samples are presented in Figure 5. Analytical data for these samples are summarized in Table 4.

A complete set of laboratory analytical reports is presented in Appendix A-1.

2.3.2 B36-RE-1 Excavated Soil

Soil removal at remedial excavation B36-RE-1 began on August 25, 1997 and was completed on September 9, 1997.

Approximately 2,143 total cubic yards of soil associated with this excavation was removed with an excavator, transported and stockpiled west of the Site access road as presented in Figure 6 (Stockpiles A through I). Land Treatment Unit B36-LTU was subsequently created from combining Stockpiles A through I as indicated in Figure 7.

The following types of samples have been collected and analyzed to evaluate the soil quality in B36-RE-1 excavated soil:

- Excavated hot spot samples
- Kennedy/Jenks Consultants sample (previously collected)
- Stockpile samples
- Land Treatment Unit samples

Two hot spot samples and a Kennedy/Jenks (1997) sample collected during previous investigative efforts were collected at the locations presented in Figure 12; the areas around these locations were later excavated. Analytical data for these samples are summarized in Table 5.

Five stockpile samples were collected. The location of these samples are presented in Figure 6. Analytical data for these samples are summarized in Table 6.

Two Land Treatment Unit samples were collected. The locations of these samples are presented in Figure 7. Analytical data for these samples are summarized in Table 7.

A complete set of laboratory analytical reports is presented in Appendix A-2.

2.3.3 B37CL-RE-1 Fill Soil and Excavated Soil

Soils excavated from the Building 37 East Clarifiers area were segregated into three groups: fill soil (soil excavated from within C1 and C2), Stockpiles A and B (first 465 cubic yards from B37CL-RE-1), and Land Treatment Unit B37CL-LTU-1 (remainder of B37CL-RE-1).

Fill soil located within C1 and C2 was removed on September 18, 1997. Approximately 90 cubic yards of fill soil was removed with an excavator, transported and stockpiled west of the Site access road as presented in Figure 8.

Remedial excavation B37CL-RE-1 began on October 15, 1997 and was completed on December 15, 1997. Approximately 465 cubic yards of soil was removed with an excavator, transported and stockpiled west of the Site access road as presented in Figure 8 (Stockpiles A and B). Additionally, approximately 1,130 cubic yards of soil was removed with an excavator and stockpiled adjacent to the remedial excavation. This additional soil was subsequently transported to west of the Site access road as presented in Figure 9 (Land Treatment Unit B37CL-LTU-1). The total quantity of soil excavated at remedial excavation B37CL-RE-1 was 1,595 cubic yards.

The following types of samples have been collected and analyzed to evaluate the soil quality in B37CL-RE-1 fill soil and excavated soil:

- Fill soil samples
- Excavated hot spot samples
- Stockpile sample
- Land Treatment Unit sample

Three fill soil samples were collected at the location presented in Figure 13. The analytical data for these samples are summarized in Table 8.

Twenty hot spot samples were collected at the locations presented in Figure 14. All hot spot sample locations were excavated and placed into Land Treatment Unit B37CL-LTU-1; no excavated hot spot sample locations were present within Stockpiles A or B. Analytical data for these samples are summarized in Table 9.

One stockpile sample was collected. The location of this sample is presented in Figure 8. Analytical data for this sample are summarized in Table 10.

One Land Treatment Unit sample was collected. The location of this sample is presented in Figure 9. Analytical data for this sample are summarized in Table 11.

A complete set of laboratory analytical reports is presented in Appendix A-3.

2.3.4 PL-RE-1 Excavated Soil

Soil removal at remedial excavation PL-RE-1 was conducted on December 11, 1997.

Approximately 1,700 total cubic yards of soil associated with this excavation was removed with an excavator, transported and stockpiled adjacent to the excavation and east of the Building 37 footprint as presented in Figure 10 (Land Treatment Unit PL-LTU-1).

The following types of samples have been collected and analyzed to evaluate the soil quality in PL-RE-1 excavated soil:

- Land Treatment Unit samples

Three Land Treatment Unit samples were collected at the locations presented in Figure 10. Analytical data for these samples are summarized in Table 12.

A complete set of laboratory analytical reports is presented in Appendix A-4.

2.4 CONFIRMATION SAMPLING

2.4.1 BA-RE-1 Remedial Excavation

Eight confirmation samples were collected at locations presented in Figure 15. Analytical data are summarized in Table 13. A complete set of analytical data is presented in Appendix B-1.

2.4.2 B36-RE-1 Remedial Excavation

Twenty-three confirmation samples were collected at locations presented in Figure 16. The analytical data for these samples are summarized in Table 14. A complete set of laboratory analytical reports is presented in Appendix B-2.

2.4.3 B37CL-RE-1 Remedial Excavation

Four confirmation samples were collected at locations presented in Figure 17. The analytical data for these samples are summarized in Table 15. A complete set of laboratory analytical reports is presented in Appendix B-3.

2.4.4 PL-RE-1 Remedial Excavation

One confirmation sample was collected at the location presented in Figure 18. The analytical data for these samples are summarized in Table 16. A complete set of laboratory analytical reports is presented in Appendix B-4.

SECTION 3.0

DATA SUMMARIES AND CONCLUSIONS

This section presents soil screening criteria and the methodology used throughout the project to evaluate: (1) whether the soil stockpiles were suitable for use as backfill, or required treatment and/or off-site disposal, and (2) whether all affected soil has been removed based on confirmation sample data, or if additional excavation of affected soil is warranted.

3.1 SOIL SCREENING CRITERIA

The soil screening criteria have been developed to satisfy two primary objectives: (1) residual concentrations in backfill material and surface soil must be below levels projected to impact underlying drinking water sources, and (2) residual concentration in backfill materials and surface soil must be below levels projected to potentially impact human health under future construction and commercial/industrial activities at the Site.

In accordance with these objectives, soil screening criteria were developed for both drinking water and human health protection. The development of these soil screening criteria is discussed below followed by a summary of how these values were implemented.

3.1.1 Drinking Water

The generalized hydrostratigraphic succession at the Site is as follows (Kennedy/Jenks, 1996; Dames & Moore, 1993; Department of Water Resources, 1961):

SURFACE

Bellflower Aquitard

Gage Aquifer

El Segundo Aquitard

Lynwood Aquifer

Depth to groundwater at the Site is approximately 65 feet. Hydrostratigraphic information from voluminous data collected at the neighboring Del Amo and Montrose Chemical Superfund Sites can be correlated with subsurface information collected at the Site. Hydrostratigraphic correlations suggest that the shallowest groundwater at the Site occurs in the Bellflower Aquitard, which is not recognized as a drinking water source in the region (Dames & Moore, 1993).

Although the depth to the top of the Gage Aquifer should vary from approximately 120 to 150 feet (from west to east) across the Site, the Gage Aquifer is not utilized as a source of drinking water in the region (Dames & Moore, 1993). Consequently, the shallowest drinking water resource in the region would therefore be the Lynwood Aquifer, projected to occur at the depths of approximately 210 to 240 feet (from west to east) across the Site.

Based on the depth to the first drinking water source, the following permissible concentrations to 12 feet below ground surface have been approved by the RWQCB:

Analytes	Permissible Level
TRPH	
C4 - C12	2,000 mg/kg
C13 - C22	10,000 mg/kg
C22+	50,000 mg/kg
Metals	TTLC and STLC

Notes:

TTLC: Total Threshold Limit Concentration per CCR Title 22.

STLC: Soluble Threshold Limit Concentration per CCR Title 22.

A Waste Extraction Test (WET) is performed on samples with total metal concentration(s) greater than 10 times the STLC but less than the TTLC, per CCR Title 22.

3.1.2 Human Health

Site-specific health-based soil screening values were developed by IESI using standard United States Environmental Protection Agency (USEPA) and California Environmental Protection Agency (Cal/EPA) methodologies. These values were derived assuming future commercial industrial land use with an interim construction phase. Each value will be used as a predictor of the risk posed by individual VOC, SVOC, PCB, and metal contaminants in soil. The additive effects of multiple contaminants have been accounted for by setting conservative target risk levels at 1×10^{-6} for carcinogens and 0.2 for toxicants. The final cumulative risks for all residual contaminants at the Site will be addressed in the post-remedial risk assessment. Table 17 summarizes the Site-specific health-based soil screening values to be used at the Site. A more detailed discussion of the methodologies used to derive these values has been presented in the *Health-Based Remediation Goals for Surface Soils* document (IESI, 1997(b)).

3.1.3 Evaluation Process

EXCAVATED SOIL

Soil excavated at the Site was generally subjected to the soil screening evaluation process depicted in Figure 19. This evaluation process incorporates both drinking water and human health-based criteria. Soils that failed any portion of this test were subjected to treatment

prior to use as backfill, or were disposed of off-site. Once soils passed all aspects of the evaluation procedure, they were used for backfill.

Additionally, metal concentration(s) in excavated soils were used to further characterize the waste soil as follows:

- a) Excavated soils were classified as non-RCRA hazardous waste if representative soil samples contained any metal in total concentration equal to or greater than its respective TTLC per CCR Title 22.
- b) Representative soil samples were analyzed for soluble metal concentration using the Waste Extraction Test (WET) if the total concentration of any metal was equal to or greater than 10 times its respective STLC but less than its TTLC per CCR Title 22. Excavated soil was classified as non-RCRA hazardous waste if representative soil samples contained any metal in soluble concentration using the WET equal to or greater than its respective STLC per CCR Title 22.
- c) Additionally, representative soil samples which were analyzed using the WET were also analyzed for soluble metal concentrations using the Toxic Characteristic Leaching Procedure (TCLP). Excavated soil was classified as a RCRA characteristic hazardous waste if the soluble concentration of any metal using the TCLP was equal to or greater than the toxicity characteristic (TC) per CCR Title 22.

CONFIRMATION SAMPLES

Confirmation soil data at the Site were generally subjected to the soil screening evaluation process depicted in Figure 20. This evaluation process incorporates both drinking water and human health-based criteria. Additional soil excavation and/or treatment was conducted at locations where confirmation sample data failed any portion of this test, and the maximum excavation depth of 12 feet had not been reached.

3.2 EXCAVATED SOIL EVALUATIONS

Chemicals of concern at the Site can be summarized as follows:

- Petroleum hydrocarbons
- VOCs
- SVOCs
- PCBs
- Metals

The sampling and analysis program for remedial excavations discussed in this report was conservatively focused on these chemicals of concern by implementing the following analytical schedule:

- All hot spot and stockpile samples were analyzed for TRPH and metals, with the exception of stockpile sample B36-RE1-SP3 which was analyzed for SVOCs only.
- All hot spot and stockpile samples which contained TRPH in concentration greater than 10,000 mg/kg were subsequently analyzed for carbon chain length.
- All stockpile samples were additionally analyzed for VOCs and SVOCs, with the exception of stockpile sample B36-RE1-SP3 which was analyzed for SVOCs only.
- Stockpile samples were selectively analyzed for PCBs.
- Hot spot samples were selectively analyzed for VOCs, SVOCs, hydrocarbon fuel characterization, and PCBs, depending on the potential for occurrence of these chemicals at the sampling location.

Excavated soil evaluations and dispositions are discussed below and summarized in Table 18.

3.2.1 BA-RE-1 Excavated Soil

Soil excavated from remedial excavation BA-RE-1 was initially placed in Stockpiles A, B, and C. Soil samples associated with Stockpiles A, B, and C are presented in Table 2 and Table 3. These data are summarized and evaluated below.

Petroleum Hydrocarbons: Excavated hot spot sample BA-GS-1-1.5' (Stockpile B) contained the highest concentration of TRPH (15,000 mg/kg). This sample contained TRPH above the permissible limit of 10,000 mg/kg and therefore the sample was submitted for carbon chain speciation. This sample did not meet or exceed the permissible limits for specific hydrocarbon chains. All other samples contained TRPH in concentration below the permissible limit and therefore were not speciated.

VOCs: VOCs were detected in three samples; however, all VOC concentrations were below Site-specific health-based soil screening values.

SVOCs: SVOCs were detected in two samples, however, all SVOC concentrations were below Site-specific health-based soil screening values.

PCBs: PCBs were not detected.

Metals: Stockpile sample BA-RE1-SP3 (Stockpile C) contained arsenic (16 mg/kg) above the Site-specific health-based soil screening value of 14 mg/kg. However, this sample did not exceed TTLC or 10 times the STLC value for arsenic. None of the other samples met or exceeded TTLC, 10 times the STLC, or Site-specific health-based soil screening values.

Disposition: Stockpiles A, B, and C were further treated by the Land Treatment Unit process to remove VOCs as BA-LTU-1 (Stockpile C) and BA-LTU-2 (Stockpiles A and B).

Land Treatment Unit soil samples from BA-LTU-1 and BA-LTU-2 are presented in Table 4. These data are summarized and evaluated below.

Petroleum Hydrocarbons: Excavated hot spot and Stockpile samples were analyzed for TRPH and met permissible limits. Therefore, Land Treatment Unit samples were not submitted for analysis of TRPH.

VOCs: VOCs were not detected.

SVOCs: SVOCs were not detected.

PCBs: Stockpile sample BA-RE1-SP1A was analyzed for PCBs and no PCBs were detected. Therefore, Land Treatment Unit samples were not submitted for analysis of PCBs.

Metals: None of the samples met or exceeded TTLC, 10 times the STLC, or Site-specific health-based soil screening values.

Conclusion: BA-LTU-1 contained arsenic in concentration above the Site-specific health-based soil screening value and will be removed from the Site and disposed as non-hazardous waste. Off-site disposal documentation will be provided in an addendum to this report. The data show that soil in Land Treatment Unit BA-LTU-2 met the soil screening criteria presented in Section 3.1 of this report and therefore will be used as backfill material. The location of the backfilled soil will be provided in an addendum to this report.

3.2.2 B36-RE-1 Excavated Soil

Soil excavated from remedial excavation BA-RE-1 was initially placed in Stockpiles A through I. Soil samples associated with Stockpiles A through I are presented in Table 5 and Table 6. These data are summarized and evaluated below.

Petroleum Hydrocarbons: Excavated hot spot sample WL-GS-6-4' (Stockpile E) contained the highest concentration of TRPH (340 mg/kg). This concentration is below the permissible limit; however, water line (WL) hot spot samples were speciated to be conservative. The excavated WL hot spot samples did not meet or exceed the permissible limits for specific hydrocarbon chains.

VOCs: VOCs were detected in three samples; however, all VOC concentrations were below Site-specific health-based soil screening values.

SVOCs: SVOCs were detected in two samples. The concentration of benzo(a)pyrene in excavated hot spot sample WL-GS-5-4' (1.30 mg/kg) (Stockpile C) exceeded the Site-specific health-based soil screening value for this compound of 1.14 mg/kg. All other SVOC concentrations were below Site-specific health-based soil screening values.

PCBs: PCBs were detected in excavated hot spot sample WL-GS-6-4' in concentration of 0.036 mg/kg, which is below the Site-specific health-based soil screening value for aroclor 1254 of 0.87 mg/kg.

Metals: None of the samples met or exceeded TTLC, 10 times the STLC, or Site-specific health-based soil screening values.

Disposition: An approximately 50 cubic yard portion of Stockpile C containing excavated hot spot sample WL-GS-5-4' was removed from the Site and disposed of as non-hazardous waste. Non-hazardous waste disposal documentation is presented in Appendix C. The remainder of Stockpile C and the other stockpiles were further treated by the Land Treatment Unit process to remove VOCs as B36-LTU.

Land Treatment Unit soil samples from B36-LTU were analyzed for VOCs only. These data are presented in Table 7 and are summarized and evaluated below.

VOCs: VOCs were not detected.

Conclusion: Land Treatment Unit samples were considered to be more representative of excavated soil quality by IESI. The Land Treatment Unit sample data show that soil in Land Treatment Unit B36-LTU met the soil screening criteria presented in Section 3.1 of this report and therefore was used as backfill material.

3.2.3 B37CL-RE-1 Fill Soil and Excavated Soil

Soils excavated from the Building 37 East Clarifiers area were segregated into three groups: fill soil (soil excavated from within C1 and C2), Stockpiles A and B (first 465 cu yds from B37CL-RE-1), and Land Treatment Unit B37CL-LTU-1 (remainder of B37CL-RE-1).

FILL SOIL

Soil samples associated with clarifier fill soil are presented in Table 8. These data are summarized and evaluated below.

Petroleum Hydrocarbons: Sample B37C2-GS-1-3' contained the highest concentration of TRPH (1,300 mg/kg). This concentration is below the permissible limit and therefore TRPH was not speciated.

VOCs: VOCs were detected in two samples; however, all VOC concentrations were below Site-specific health-based soil screening values.

SVOCs: SVOCs were detected in two samples; however, all SVOC concentrations were below Site-specific health-based soil screening values.

PCBs: PCBs were detected in sample B37C1-GS-2-10.5' in concentration of 0.120 mg/kg, which is below the Site-specific health-based soil screening value for aroclor 1254 of 0.87 mg/kg.

Metals: Sample B37C1-GS-2-10.5' contained arsenic (18 mg/kg) above the Site-specific health-based soil screening value of 14 mg/kg. This sample also exceeded 10 times the STLC value for total chromium and copper; however, this sample did not meet or exceed the STLC when analyzed using the WET, or the TC when analyzed using the TCLP. None of the other samples met or exceeded TTLC, 10 times the STLC, or Site-specific health-based soil screening values.

Conclusion: Clarifier #1 fill soil sample B37C1-GS-2-10.5' failed the Site-specific health-based soil screening value for arsenic. The location of this sample is in Section 2 of the stockpile as presented in Figure 8. Based on these data, Section 2 of this stockpile will be removed from the Site and disposed of as non-hazardous waste. Off-site disposal documentation will be provided in an addendum to this report. Fill soil sample B37C1-GS-1-3' is located in Section 1 of the stockpile as presented in Figure 8. Data from this sample met the soil screening criteria presented in Section 3.1 of this report and therefore soil in Section 1 was used as backfill material. Clarifier #2 fill soil sample B37C1-GS-1-3' also met the soil screening criteria presented in Section 3.1 of this report and therefore was used as backfill material.

STOCKPILE SOIL

The soil sample associated with Stockpiles A and B is presented in Table 10. These data are summarized and evaluated below.

Petroleum Hydrocarbons: Sample B37CL-RE-SP1 contained concentration of TRPH below the permissible limit; therefore, TRPH was not speciated.

VOCs: VOCs were not detected.

SVOCs: SVOCs were not detected.

PCBs: PCBs were not suspected to be of concern and therefore the sample was not submitted for analysis of PCBs.

Metals: The sample did not meet or exceed TTLC, 10 times the STLC, or Site-specific health-based soil screening values.

Conclusion: The data show that Stockpiles A and B met the soil screening criteria presented in Section 3.1 of this report and therefore were used as backfill material. A portion of Stockpile A has not yet been backfilled; the final location of the remaining Stockpile A soil will be provided in an addendum to this report.

LAND TREATMENT UNIT

Soil samples (hot spot and Land Treatment Unit) associated with Land Treatment Unit B37CL-LTU-1 are presented in Table 9 and Table 11. These data are summarized and evaluated below.

Petroleum Hydrocarbons: Excavated hot spot samples B37C3-GS-1-5', B37C3-GS-2-5', B37C3-GS-3-5', and B37C3-GS-4-5' contained TRPH above the permissible limit of 10,000 mg/kg. These samples were not speciated in error; however, additional samples were taken at the same locations and submitted for TRPH and carbon chain speciation. These additional samples exceeded the permissible limit of TRPH and were speciated; the samples did not meet or exceed the permissible limits for specific hydrocarbon chains. All other samples contained TRPH in concentration below the permissible limit and therefore were not speciated. The Land Treatment Unit sample B37CL-LTU1-GS-1 was not submitted for analysis of TRPH.

VOCs: VOCs were detected in ten excavated hot spot samples; however, all VOC concentrations were below Site-specific health-based soil screening values. VOCs were not detected in the Land Treatment Unit sample.

SVOCs: SVOCs were detected in ten excavated hot spot samples; however, all SVOC concentrations were below Site-specific health-based soil screening values. SVOCs were not detected in the Land Treatment Unit sample.

PCBs: PCBs were not detected in an excavated hot spot sample. Therefore, the Land Treatment Unit sample was not submitted for analysis of PCBs.

Metals: Excavated hot spot samples B37C1-GS-6-5', B37C2-GS-2-2', B37C2-GS-3-2', and B37C2-GS-5-2' contained arsenic above the Site-specific health-based soil screening value of 14 mg/kg. These samples did not exceed TTLC or 10 times the STLC value for arsenic. None of the other excavated hot spot samples met or exceeded TTLC, 10 times the STLC, or Site-specific health-based soil screening values. The Land Treatment Unit sample was not analyzed for metals.

Conclusion: The Land Treatment Unit sample data were considered to be more representative of the soils excavated at B37CL-RE-1 by IESI. These data show that Land Treatment Unit B37CL-LTU-1 met the soil screening criteria presented in Section 3.1 of this report and therefore was used as backfill material.

3.2.4 PL-LTU-1 Excavated Soil

Soil excavated from remedial excavation PL-RE-1 was initially placed in Land Treatment Unit PL-LTU-1. Soil samples associated with PL-LTU-1 are presented in Table 12. These data are summarized and evaluated below.

Petroleum Hydrocarbons: The samples were not submitted for analysis of TRPH at the direction of IESI.

VOCs: VOCs were not detected.

SVOCs: SVOCs were detected in two samples; however, all SVOC concentrations were below Site-specific health-based soil screening values.

PCBs: PCBs were not suspected to be of concern and therefore the samples were not submitted for analysis of PCBs.

Metals: None of the samples met or exceeded TTLC, 10 times the STLC, or Site-specific health-based soil screening values.

Conclusion: TRPH was not analyzed for; however, other available data show that Land Treatment Unit PL-LTU-1 met the soil screening criteria presented in Section 3.1 of this report and therefore will be used as backfill material. The location of the backfilled soil will be provided in an addendum to this report.

3.3 IN-SITU SOIL QUALITY

The post-remedial excavation confirmation sampling analytical program (see Table 1) was designed to ensure that residual soils (upper 12 feet) meet the soil screening criteria.

3.3.1 BA-RE-1 Remedial Excavation

Confirmation sample data are presented in Table 13 and can be summarized as follows:

Petroleum Hydrocarbons: The only concentration of TRPH in a confirmation sample collected from this remedial excavation was 17 mg/kg (sample BA-GS-4-3.5'). This concentration is below the permissible limits for petroleum hydrocarbons and therefore TRPH was not speciated.

VOCs: VOCs were detected in six samples; however, all VOC concentrations were below Site-specific health-based soil screening values.

SVOCs: SVOCs were detected in three samples; however, all SVOC concentrations were below Site-specific health-based soil screening values.

PCBs: PCBs were not detected.

Metals: Confirmation sample BA-GS-6-3' exceeded 10 times the STLC value for total chromium; however, this sample did not meet or exceed the STLC when analyzed using the WET, or the TC when analyzed using the TCLP, and was not above the Site-specific health-based soil screening value of 32,000 mg/kg. None of the other samples met or exceeded TTLC, 10 times the STLC, or Site-specific health-based soil screening values.

Conclusion: The data show that the residual soils in the BA-RE-1 excavation met the soil screening criteria established in Section 3.1 of this report. Accordingly, this remedial excavation was backfilled.

3.3.2 B36-RE-1 Remedial Excavation

Confirmation sample data are presented in Table 14 and can be summarized as follows:

Petroleum hydrocarbons: The maximum concentration of TRPH in a confirmation sample collected from this remedial excavation was 540 mg/kg (sample B36-GS-25-5'). This concentration is below the permissible limits for petroleum hydrocarbons and therefore TRPH was not speciated.

VOCs: VOCs were detected in ten samples; however, all VOC concentrations were below Site-specific health-based soil screening values.

SVOCs: SVOCs were detected in two samples; however, all SVOC concentrations were below Site-specific health-based soil screening values.

PCBs: PCBs were detected in two samples in concentrations of 0.120 mg/kg and 0.026 mg/kg. These concentrations are below the Site-specific health-based soil screening value for aroclor 1254 of 0.87 mg/kg.

Metals: Sample B36-GS-25-5' contained arsenic (17 mg/kg) above the Site-specific health-based soil screening value of 14 mg/kg. However, this sample did not meet or exceed TTLC or 10 times the STLC. None of the other samples met or exceeded TTLC, 10 times the STLC, or Site-specific health-based soil screening values.

Conclusion: With the exception of sample B36-GS-25-3', the data indicate that the residual soils in the B36-RE-1 excavation met the soil screening criteria established in Section 3.1 of this report. Accordingly, this remedial excavation was backfilled at the direction of IESI. However, soil around the location of sample B36-GS-25-3' will be excavated and disposed off-site as non-hazardous waste. An addendum to this report will document this activity.

3.3.3 B37CL-RE-1 Remedial Excavation

Confirmation sample data are presented in Table 15 and can be summarized as follows:

Petroleum hydrocarbons: The only concentration of TRPH in a confirmation sample collected from this remedial excavation was 19 mg/kg (sample B37C3-GS-5-12'). This concentration is below the permissible limits for petroleum hydrocarbons and therefore TRPH was not speciated.

VOCs: VOCs were detected in one sample; however, all VOC concentrations were below Site-specific health-based soil screening values.

SVOCs: SVOCs were not detected.

PCBs: PCBs were not suspected to be of concern at this remedial excavation; therefore, the samples were not submitted for analysis of PCBs.

Metals: All concentrations were below TTLC, 10 times the STLC, and Site-specific health-based soil screening values.

Conclusion: The data show that the residual soils in the B37CL-RE-1 excavation met the soil screening criteria established in Section 3.1 of this report. Accordingly, this remedial excavation was backfilled at the direction of IESI.

3.3.4 PL-RE-1 Remedial Excavation

Confirmation sample data are presented in Table 16 and can be summarized as follows:

Petroleum hydrocarbons: TRPH was not detected.

VOCs: VOCs were not detected.

SVOCs: One SVOC was detected; however, the SVOC concentration was below the Site-specific health-based soil screening value.

PCBs: PCBs were not suspected to be of concern at this remedial excavation; therefore, samples were not submitted for analysis of PCBs.

Metals: All concentrations were below TTLC, 10 times the STLC, and Site-specific health-based soil screening values.

Conclusion: The data show that the residual soils in the PL-RE-1 excavation met the soil screening criteria established in Section 3.1 of this report. Accordingly, this remedial excavation was backfilled.

SECTION 4.0

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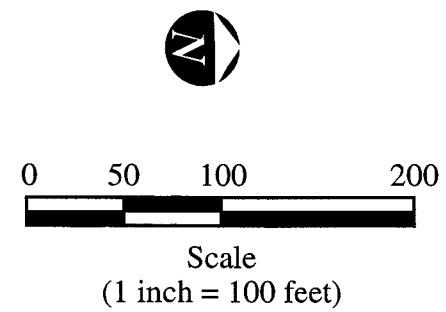
Figures

Figures

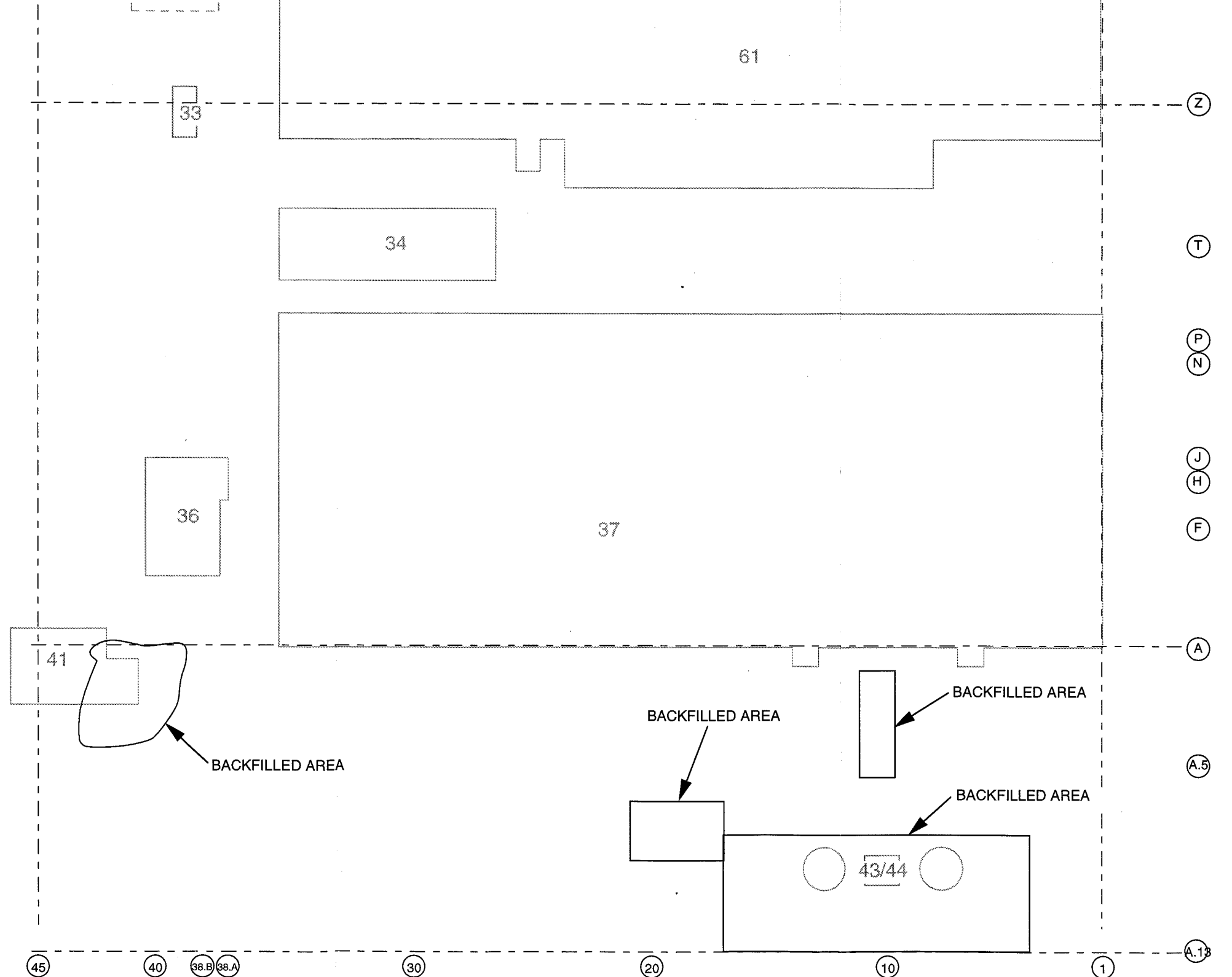


MONTGOMERY WATSON

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Hazardous Materials
Storage Pad



BOEING REALTY CORPORATION
C-6 FACILITY

Soil Backfill Locations

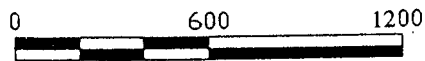
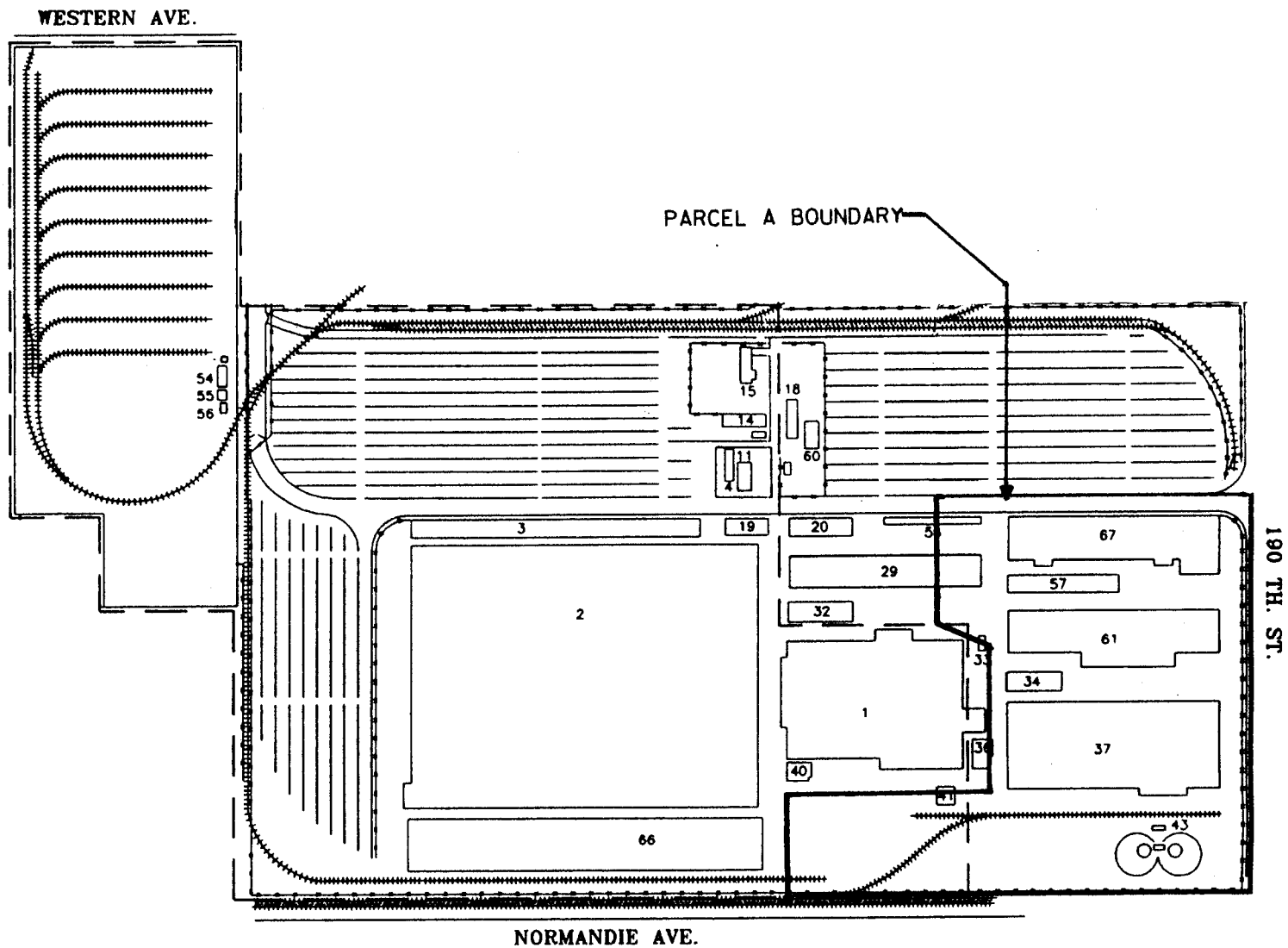
FIGURE 21



MONTGOMERY WATSON

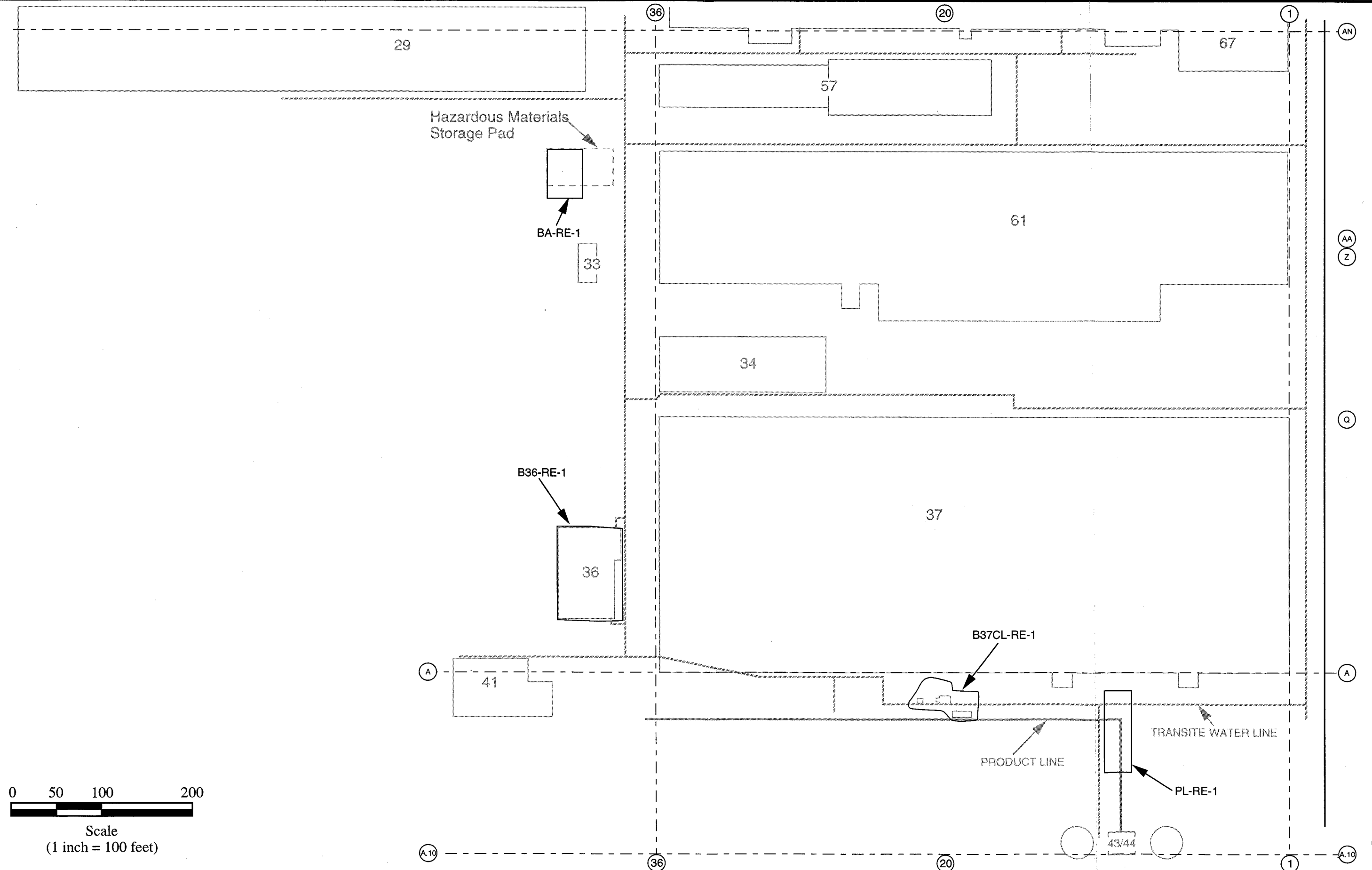
C-6 FACILITY MAP

FIG. 1



Approximate Scale: 1"=600'

Base map developed from Facility Layout and Subject Property Map by Kennedy/Jenks Consultants, May 1996.

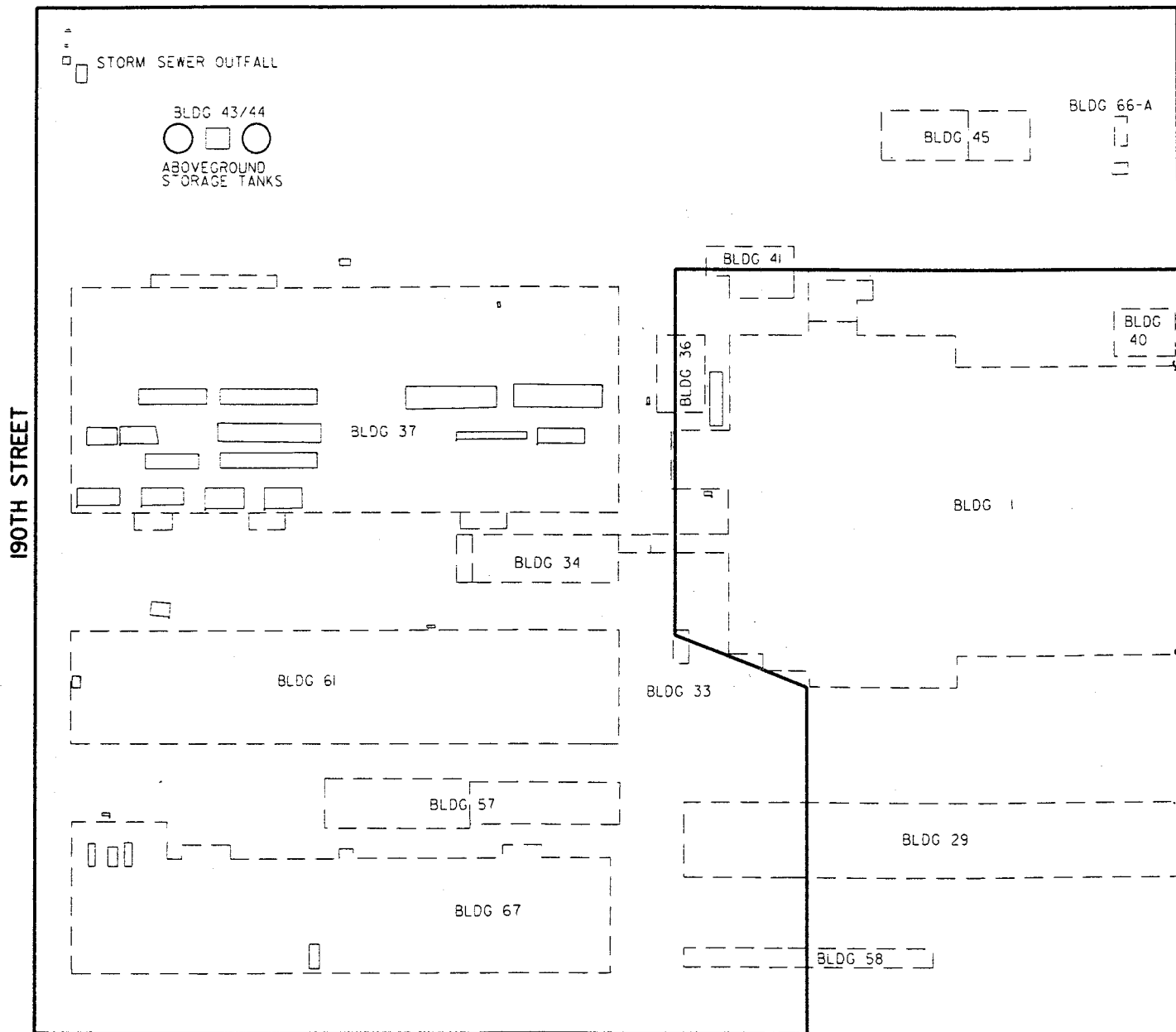


Remedial Excavations BA-RE-1, B36-RE-1, B37CL-RE-1, and PL-RE-1 Locations

FIGURE 3

BOE-C6-0084391

NORMANDIE AVENUE



PARCEL A BOUNDARY



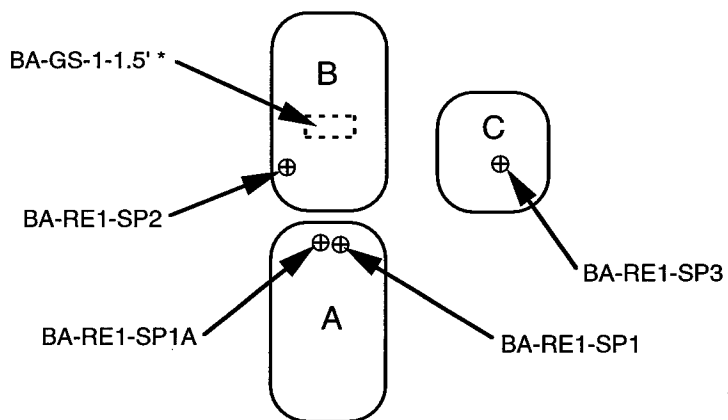
BASE MAP DEVELOPED FROM TAIT & ASSOCIATES INC.
SURVEY DRAWING DATED 10/22/96.

FILE NO. 1

REV				DATE	BY	DESCRIPTION	SCALE: AS SHOWN	DESIGNED: DRAWN: N. CHRAKIAN CHECKED: S. REINERS	SUBMITTED: PROJECT FINISHED: N. C. E. NO. DATE RECOMMENDED: MONTGOMERY WATSON N. C. E. NO. DATE	MONTGOMERY WATSON Pasadena, California	APPROVED: DATE APPROVED: DATE	BOEING REALTY CORPORATION PARCEL A SITE MAP	SHEET FIG. 2 OF 4 SHEETS
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Not to Scale

* See Figure 11 for this Hot Spot Sample Location



BUILDING 34

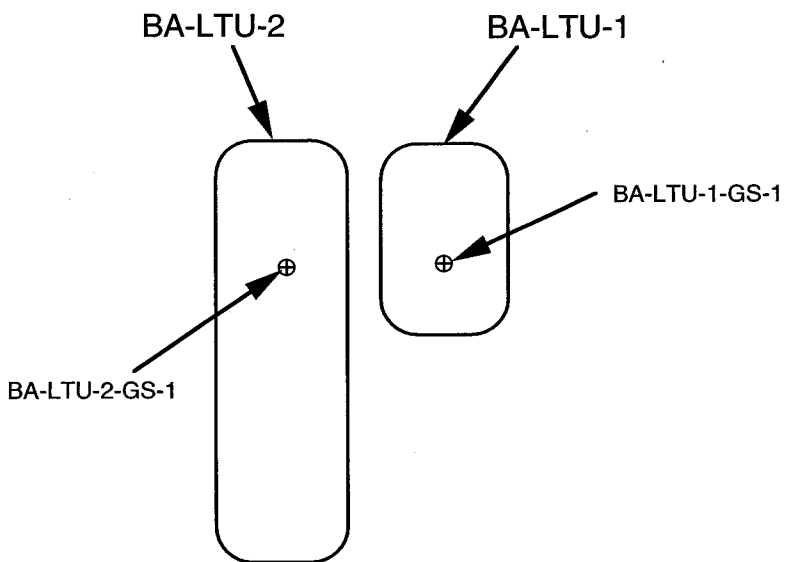
MDRC/BACKFILL/STOCKPIL/8thrp/fig4-10



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C-6 FACILITY
**Remedial Excavation BA-RE-1
Stockpiles and Sample Locations**

FIGURE 4

Not to Scale



MDRC/BACKFILL/STOCKPIL/8thrp/fig4-10



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C-6 FACILITY

FIGURE 5

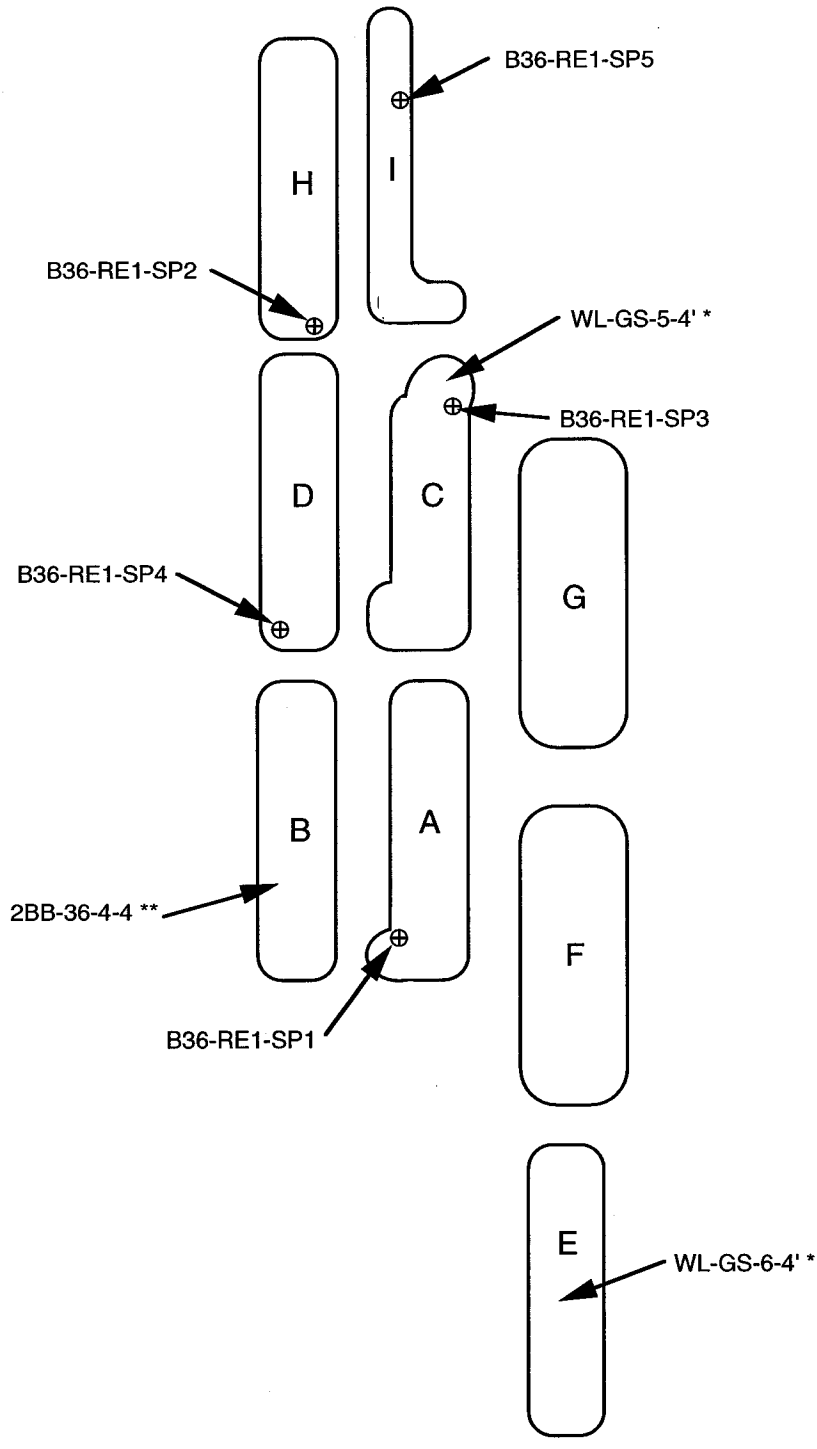
Land Treatment Units BA-LTU-1 and BA-LTU-2 Sample Locations

Not to Scale

W. 190th St

* See Figure 12 for these Hot Spot Samples Locations

** See Figure 12 for this Kennedy/Jenks Consultants Sample Location



MDRC/BACKFILL/STOCKPIL/8thrp/fig4-10

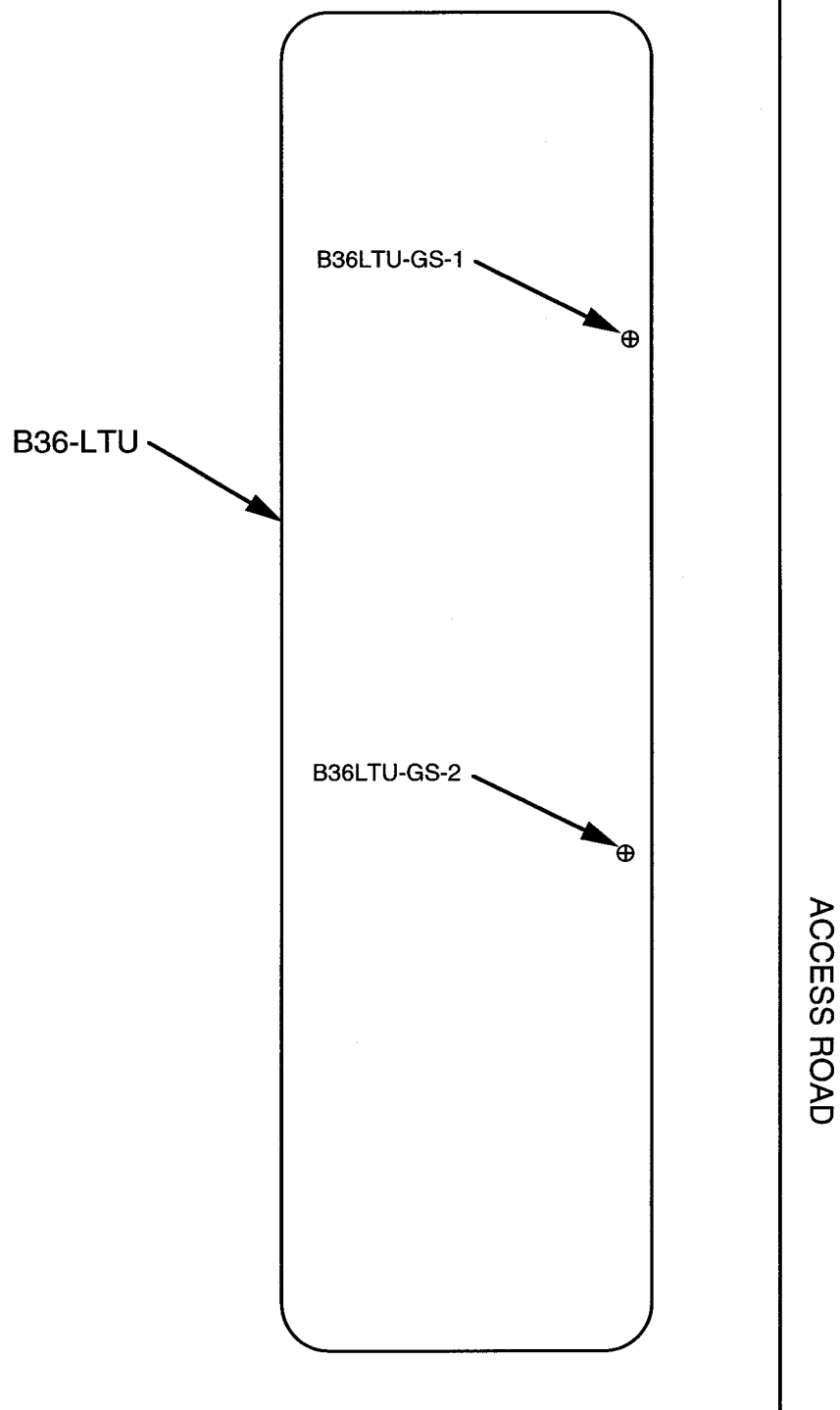
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C-6 FACILITY

**Remedial Excavation B36-RE-1
Stockpiles and Sample Locations**

FIGURE 6

Not to Scale

W. 190th St



MDRO/BACKFILL/STOCKPIL/8thrp/fig4-10

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Land Treatment Unit B36-LTU Sample Locations

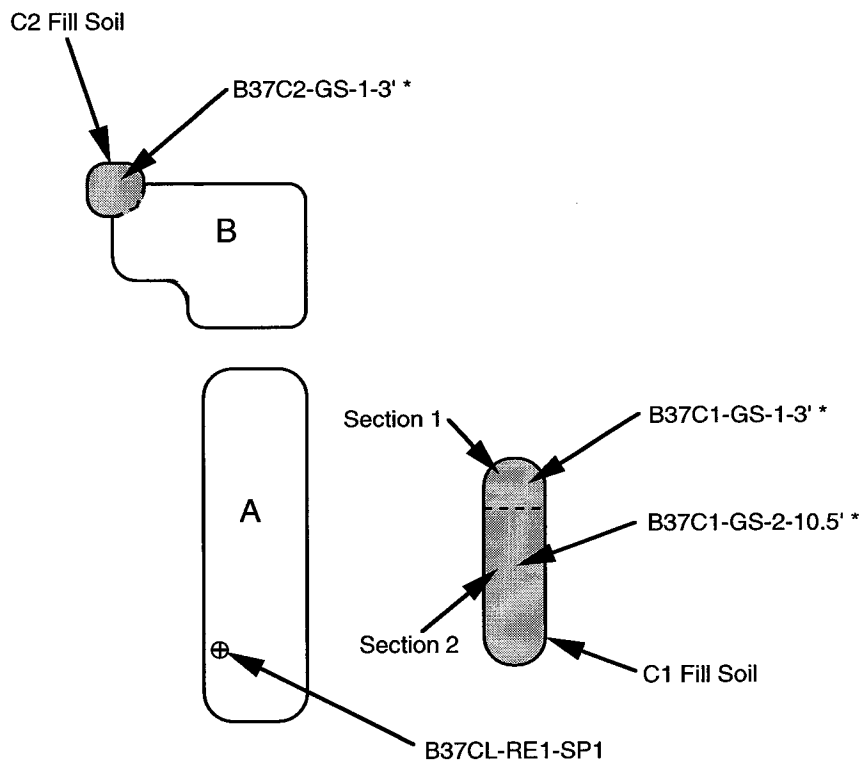
FIGURE 7

Not to Scale

Shaded area indicates clarifier fill soil

* See Figure 13 for these clarifier fill soil sample locations

W. 190th St



MDRC/BACKFILL/STOCKPIL/8thrp/fig4-10

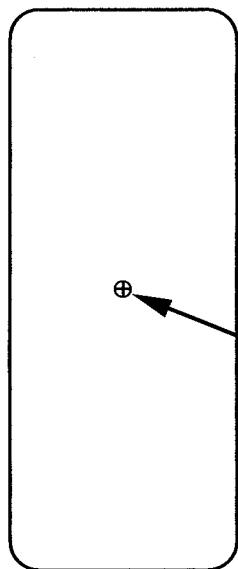
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C-6 FACILITY

Remedial Excavation B37CL-RE-1
Clarifier Fill Soil, Stockpiles, and Sample Locations

FIGURE 8

Not to Scale

W. 190th St



B37CL-LTU1-GS-1

B37CL-LTU-1

ACCESS ROAD



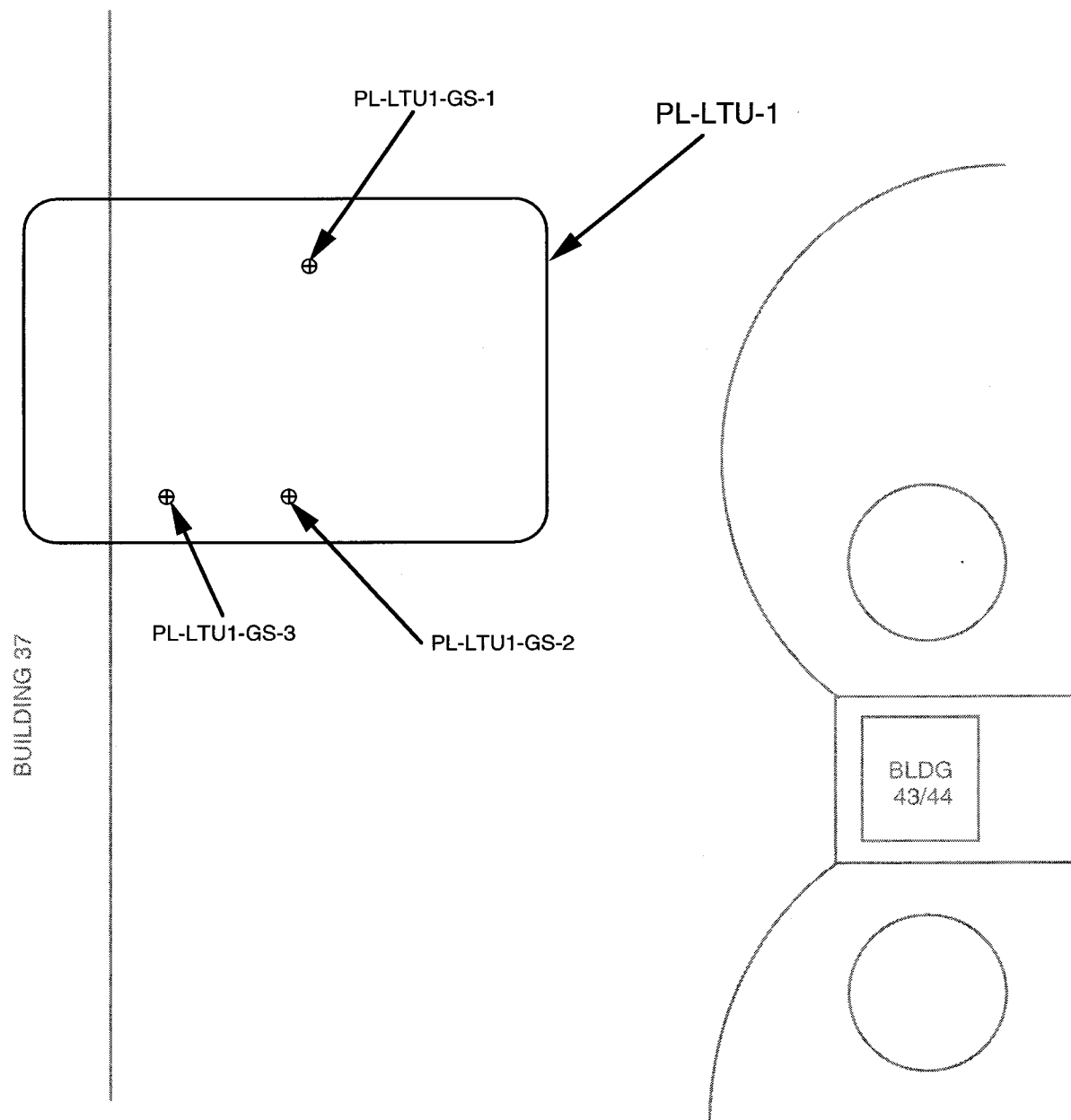
MDRO/BACKFILL/STOCKPIL/strp/fig4-10

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Land Treatment Unit B37CL-LTU-1 Sample Location

FIGURE 9

Not to Scale



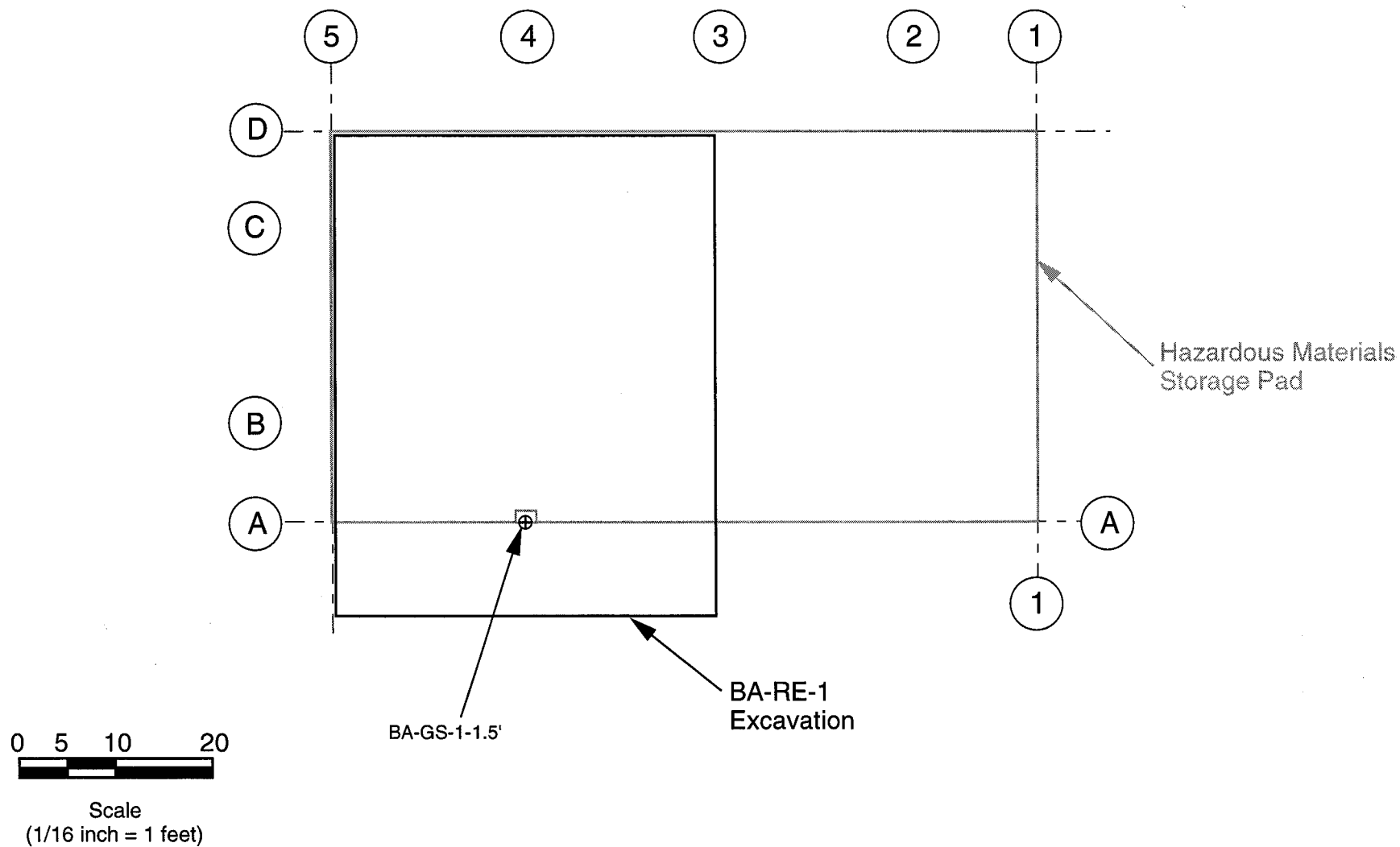
MDRC/BACKFILL/STOCKPIL/8thrp/fig4-10

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FIGURE 10

Land Treatment Unit PL-LTU-1 Sample Locations

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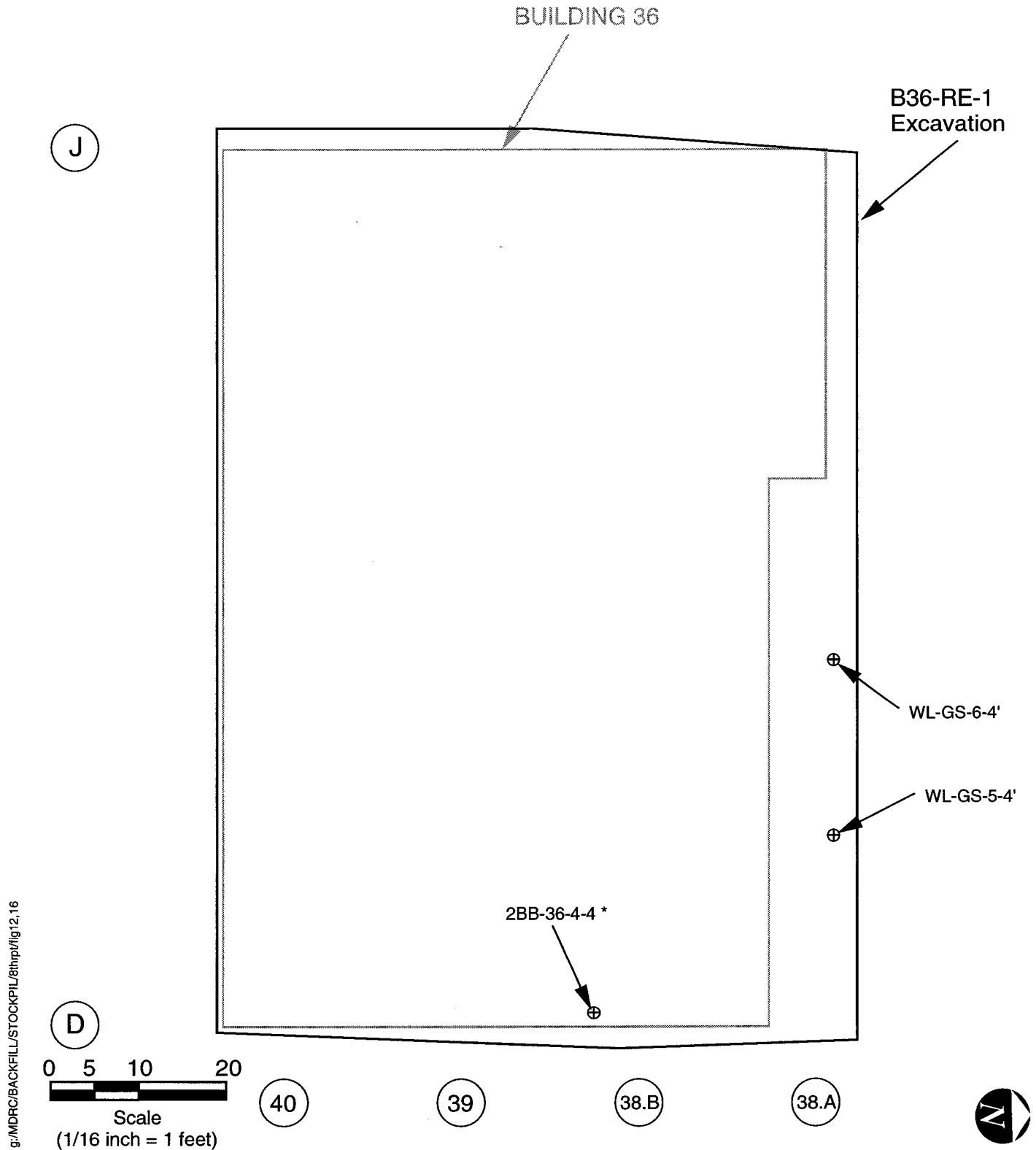


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C-6 FACILITY

Remedial Excavation BA-RE-1 Grid System and Excavated Hot Spot Sample Location

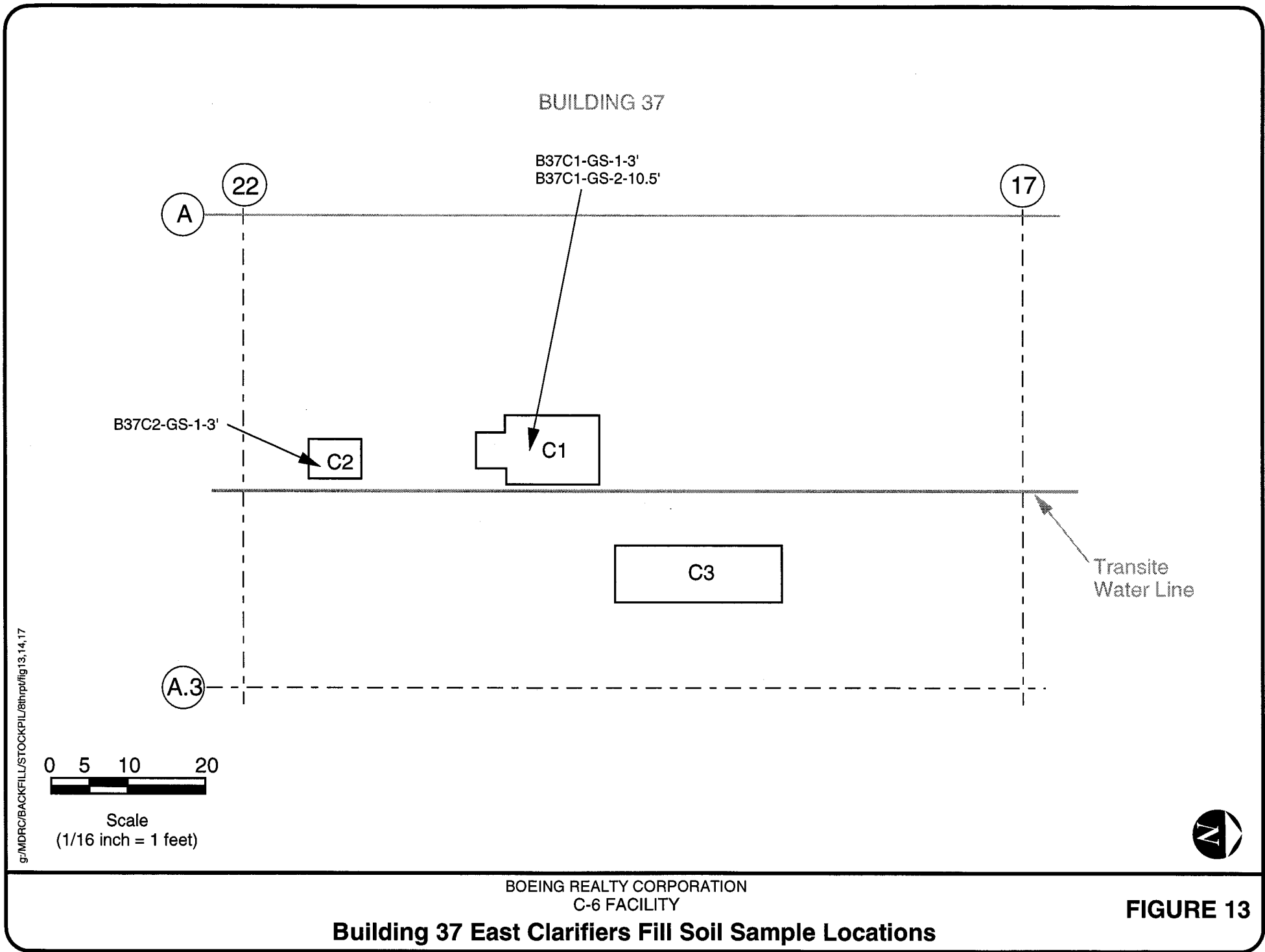
FIGURE 11

* Kennedy/Jenks Consultants sample

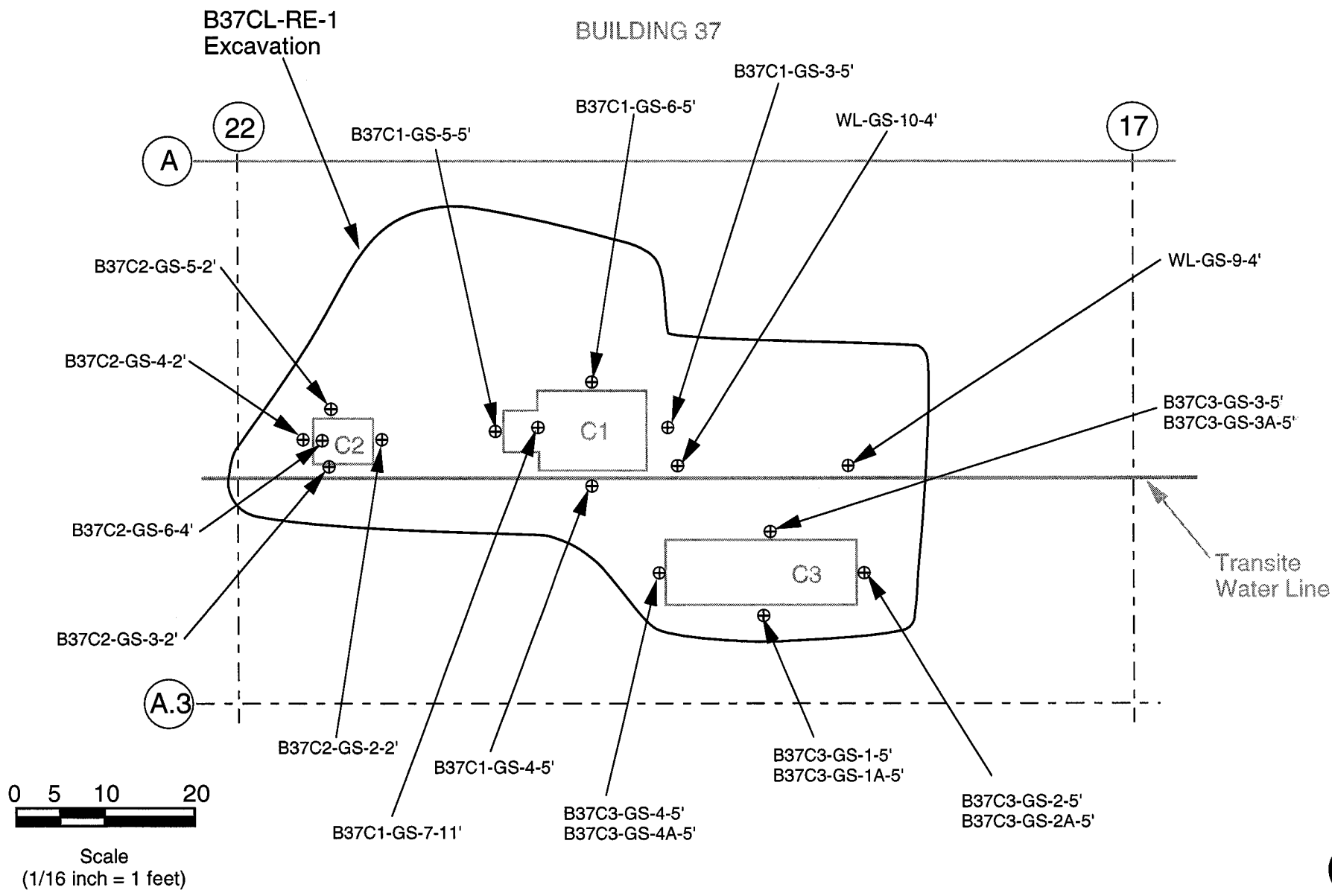


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C-6 FACILITY
Remedial Excavation B36-RE-1
Excavated Hot Spot Sample Locations

FIGURE 12



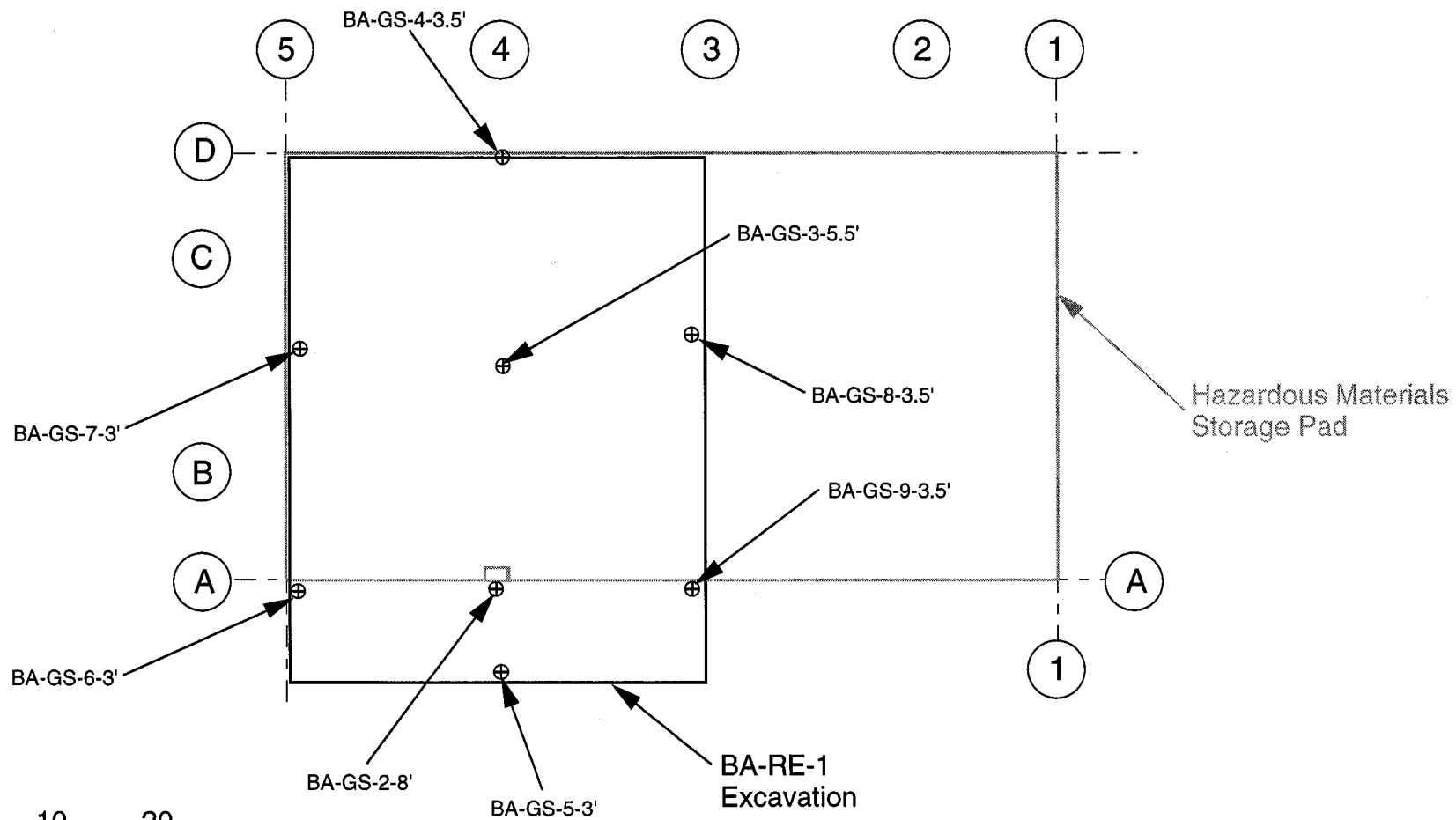
g:\MDCR\BACKFILL\STOCKPIL\8hrp\fig13,14,17



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C-6 FACILITY

Remedial Excavation B37CL-RE-1 Excavated Hot Spot Sample Locations

FIGURE 14

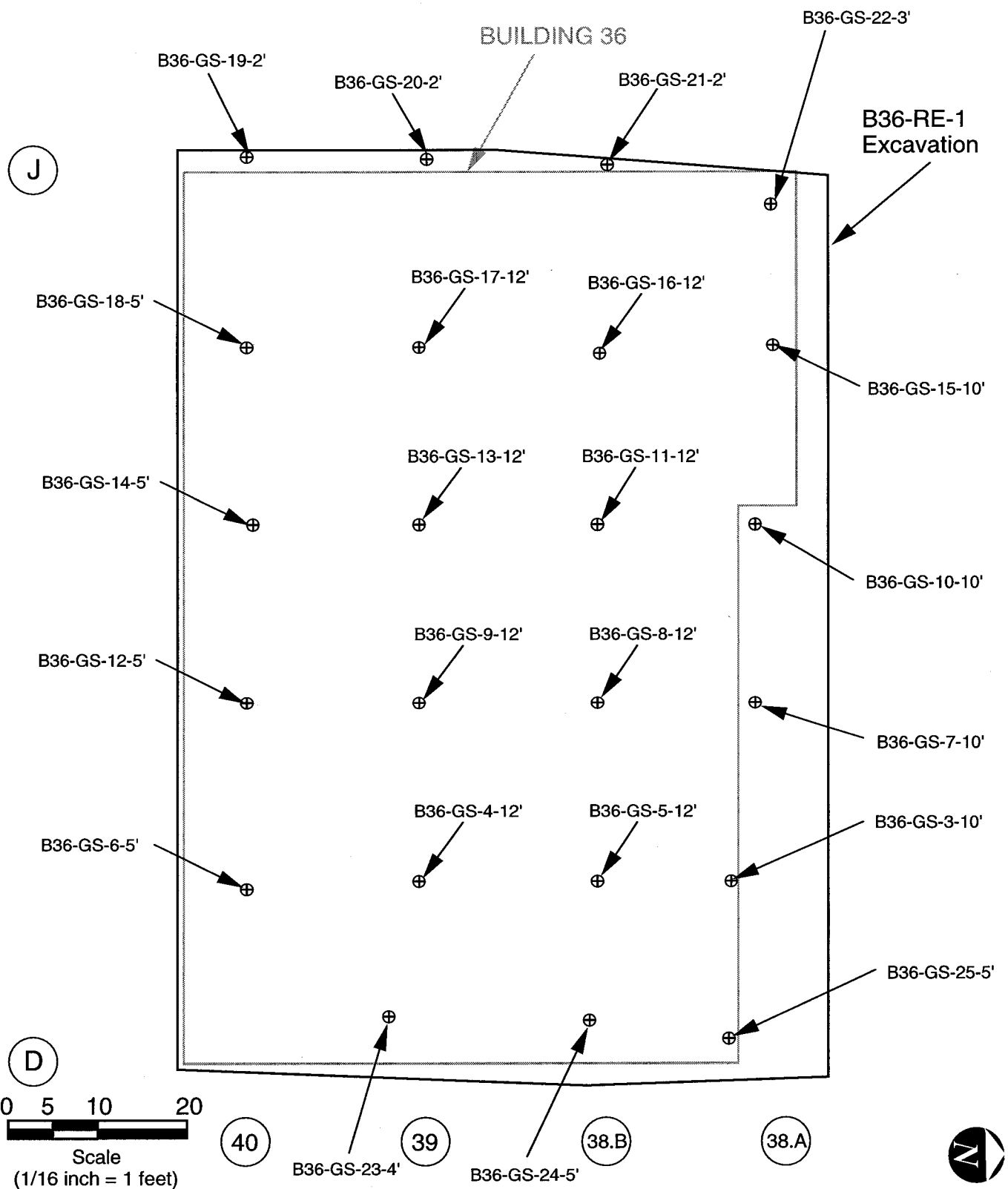


BOEING REALTY CORPORATION
C-6 FACILITY

Remedial Excavation BA-RE-1 Confirmation Sample Locations

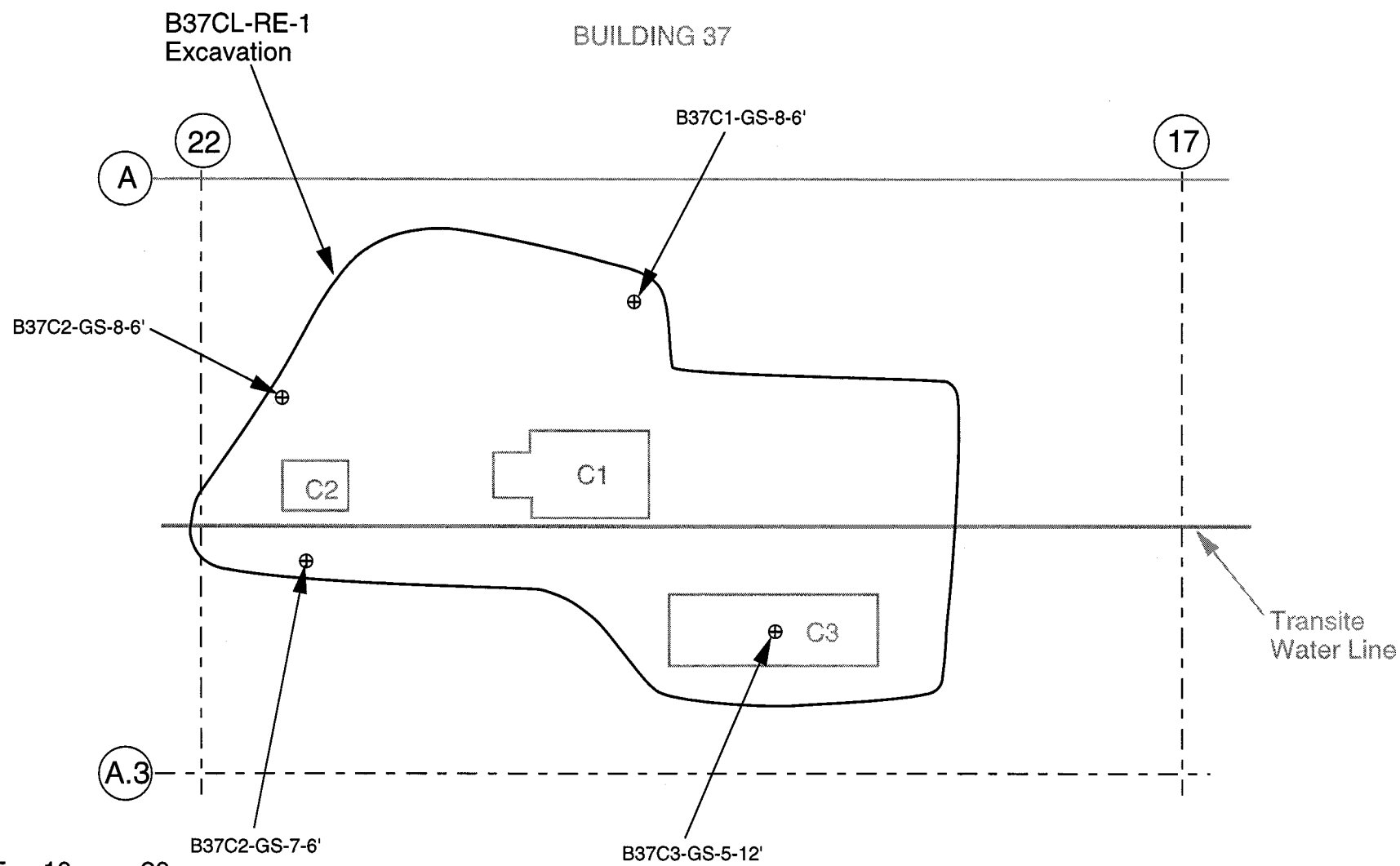
FIGURE 15

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C-6 FACILITY
**Remedial Excavation B36-RE-1
Confirmation Sample Locations**

FIGURE 16

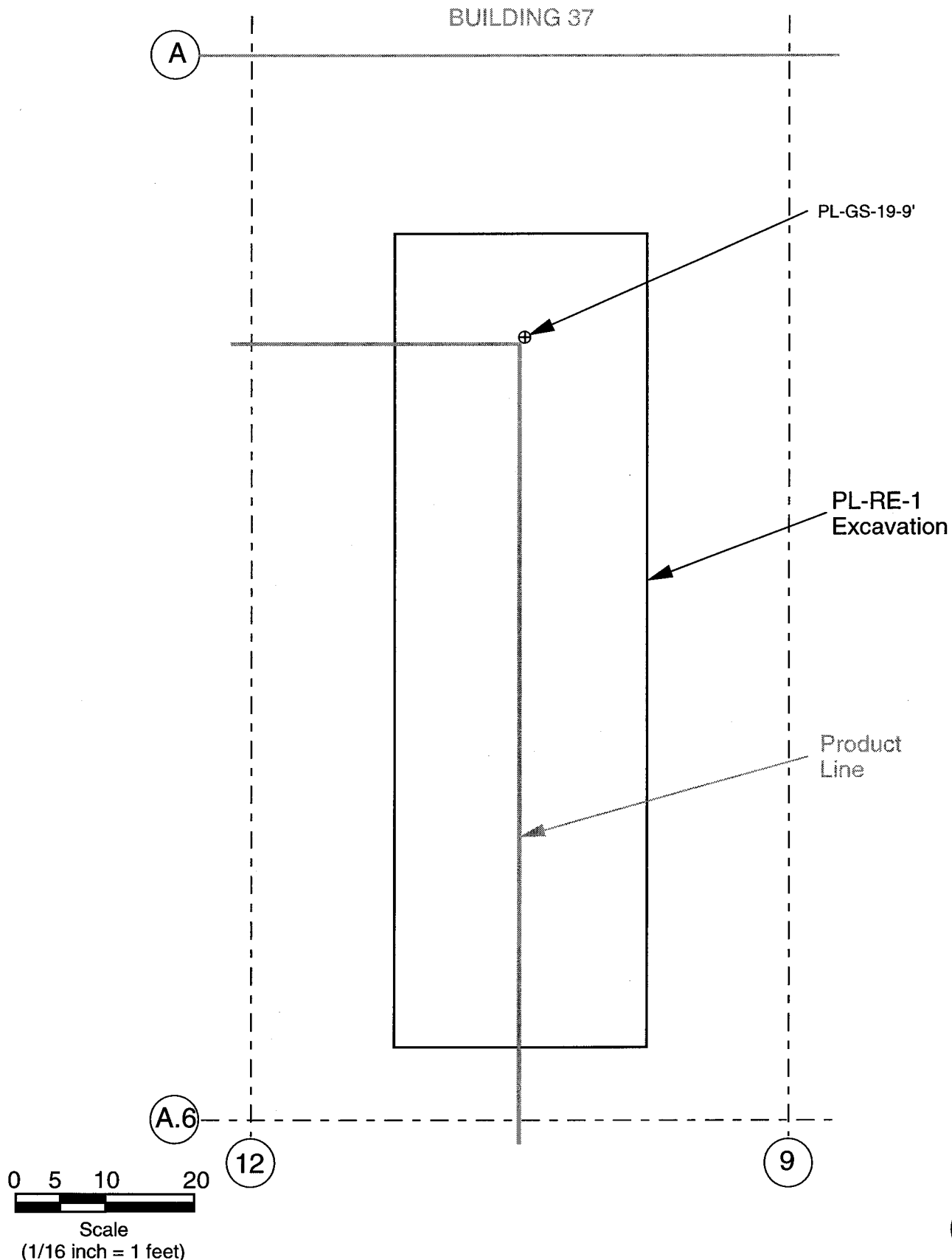


BOEING REALTY CORPORATION
C-6 FACILITY
Remedial Excavation B37CL-RE-1 Confirmation Sample Locations

FIGURE 17

g:\MDCR\BACKFILL\STOCKPIL\8thp\fig13,14,17

g:\MDRC\BACKFILL\STOCKPIL\8thrp\fig18



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**Remedial Excavation PL-RE-1
Confirmation Sample Location**

FIGURE 18

FIGURE 19
Soil Screening Evaluation Process - Excavated Soil

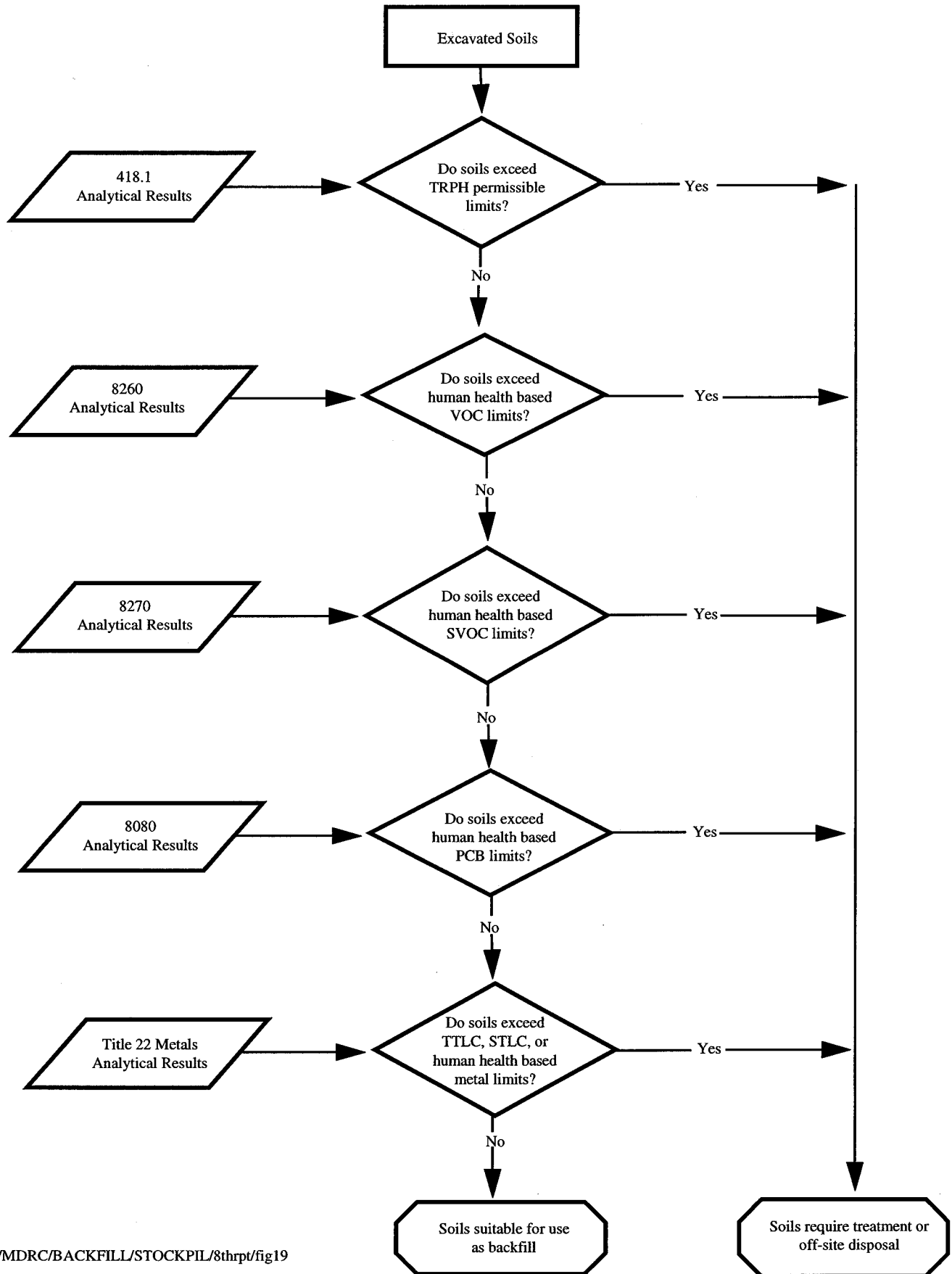
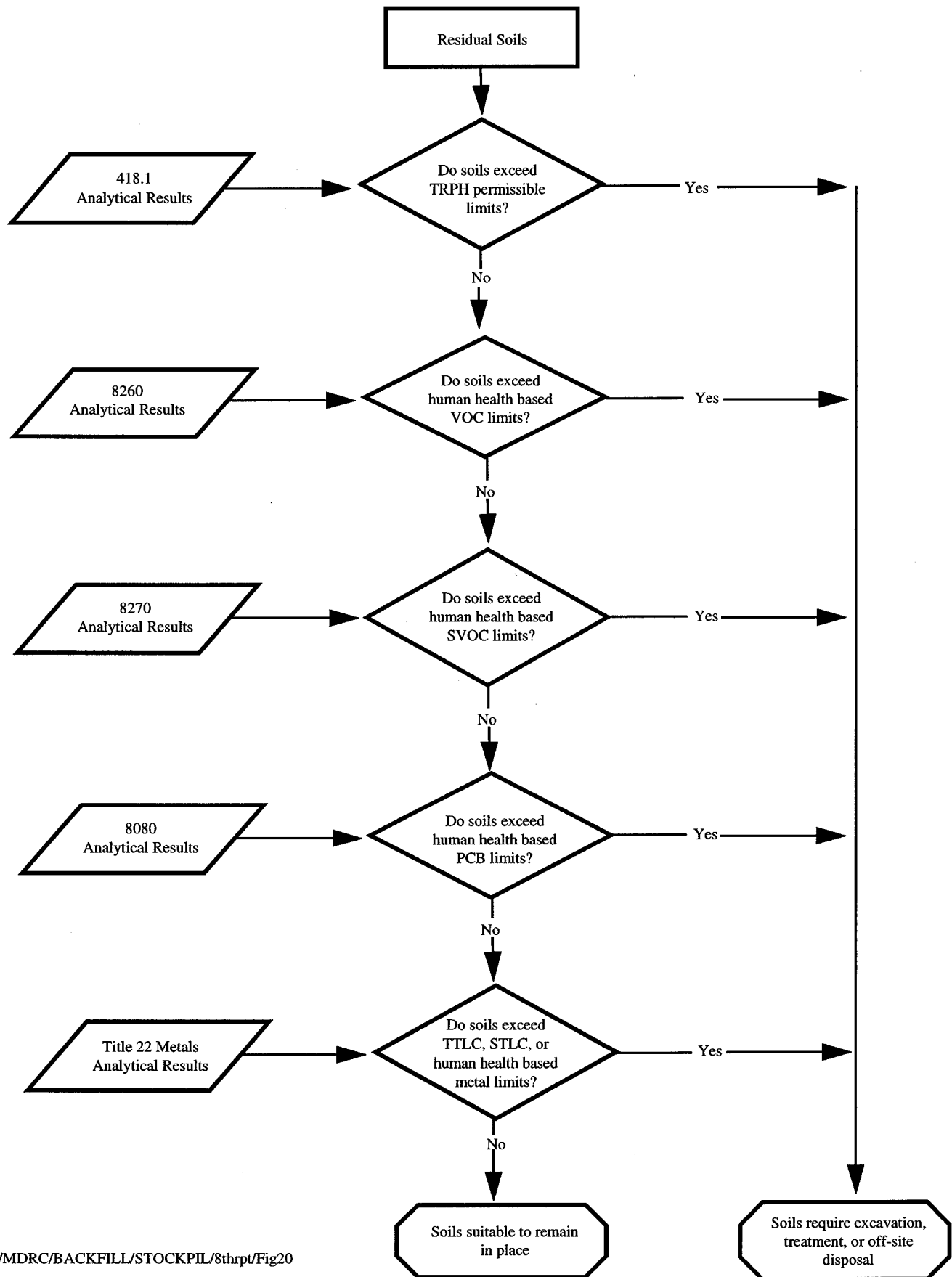


FIGURE 20
Soil Screening Evaluation Process - Residual Soil



g:/MDRC/BACKFILL/STOCKPIL/8thrpt/fig20

Tables



MONTGOMERY WATSON

TABLE 1**Summary of Soil Sample Analytical Methods**

Sample Type	EPA Method	Analyte
Hot Spot Sample	418.1 6000/7000 8260 8270 8080 8015M	TRPH (a) Metals VOCs (b) SVOCs (b) PCBs (b) Fuel Characterization (b)
Stockpile Sample	418.1 6000/7000 8260 8270 8080	TRPH (a) Metals VOCs SVOCs PCBs (b)
Land Treatment Unit Samples	6000/7000 8260 8270	Metals (b) VOCs SVOCs (b))
Confirmation Sample	418.1 6000/7000 8260 8270 8080 8015M	TRPH (a) (b) Metals VOCs (b) SVOCs (b) PCBs (b) Fuel Characterization (b)

Notes:

TRPH Total Recoverable Petroleum Hydrocarbons

VOCs Volatile Organic Compounds

SVOCs Semi-volatile Organic Compounds.

PCBs Polychlorinated Biphenyls

(a) Samples exhibiting TRPH concentration greater than 10,000 mg/kg were submitted for carbon chain analysis.

(b) Samples were selectively analyzed for these analytes.

TABLE 2
Analytical Data Summary
Remedial Excavation BA-RE-1 Excavated Hot Spot Sample

		Sample Number, Collection Date, Grid Location and Depth		
		BA-GS-1-1.5'		
		2/25/97		
		A-4 @ 1.5' bgs*		
Analyte	EPA Method			
TRPH (mg/kg)	418.1	15,000.00		Regulatory Levels
				TTLc (mg/kg) STLc (mg/L)
Title 22 Metals (mg/kg)				
Antimony	6010	<0.50		500 15
Arsenic	6010	<0.11		500 5
Barium	6010	225.00		10,000 100
Beryllium	6010	<0.06		75 0.75
Cadmium	6010	0.33		100 1
Chromium (total)	6010	13.80		2,500 5 **
Cobalt	6010	15.60		8,000 80
Copper	6010	15.30		2,500 25
Lead (total)	6010	7.80		1,000 5
Mercury	7471	<0.20		20 0.2
Molybdenum	6010	<2.50		3,500 350
Nickel	6010	9.55		2,000 20
Selenium	6010	<5.00		100 1
Silver	6010	<5.00		500 5
Thallium	6010	<0.50		700 7
Vanadium	6010	36.30		2,400 24
Zinc	6010	41.40		5,000 250
VOCs (1) (µg/kg)				
Trichlorofluoromethane	8260	18.00		
1,1-Dichloroethene	8260	230.00		
Dichloromethane	8260	7.30		
1,1-Dichloroethane	8260	1,300.00		
cis-1,2-Dichloroethene	8260	13.00		
1,1,1-Trichloroethane	8260	13,000.00		
1,2-Dichloroethane	8260	16.00		
Trichloroethene	8260	280.00		
Toluene	8260	14,000.00		
1,1,2-Trichloroethane	8260	210.00		
Tetrachloroethene	8260	99,000.00		
Ethylbenzene	8260	87.00		
m,p-Xylene	8260	290.00		
o-Xylene	8260	86.00		
1,3,5-Trimethylbenzene	8260	22.00		
1,2,4-Trimethylbenzene	8260	51.00		
p-Isopropyltoluene	8260	11.00		
Naphthalene	8260	14.00		
SVOCs (1) (µg/kg)				
bis (2-Ethylhexyl)Phthalate	8270	36,000.00		
Carbon Chain Range (mg/kg)				
C08-C09	sim. dist.	53.00		
C10-C11	sim. dist.	120.00		
C12-C13	sim. dist.	160.00		
C14-C15	sim. dist.	190.00		
C16-C17	sim. dist.	270.00		
C18-C19	sim. dist.	560.00		
C20-C23	sim. dist.	1,700.00		
C24-C27	sim. dist.	1,500.00		
C28-C31	sim. dist.	1,100.00		
C32-C35	sim. dist.	900.00		
C36-C39	sim. dist.	320.00		
C40+	sim. dist.	200.00		
PCBs (µg/kg)	8080	--		

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

mg/L = milligrams per liter

-- = not analyzed

bgs = below ground surface

ND = not detected

PCBs = Polychlorinated biphenyls

VOCs = Volatile Organic Compounds

SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons

sim. dist. = simulated distillation

(1) VOCs and SVOCs not listed were not detected

TTLc = California Total Threshold Limit Concentration

STLc = California Soluble Threshold Limit Concentration

* Refer to Figure 11 for sample location

** STLc is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 3
Analytical Data Summary
Remedial Excavation BA-RE-1 Stockpile Samples*

		Sample Number and Collection Date					
		BA-RE1-SP1 8/14/97	BA-RE1-SP1A 10/9/97	BA-RE1-SP2 10/6/97	BA-RE1-SP3 10/6/97		
Analyte	EPA Method						
TRPH (mg/kg)	418.1	550.00	--	54.00	150.00	Regulatory Levels	
						TTLc (mg/kg)	STLC (mg/L)
Title 22 Metals (mg/kg)							
Antimony	6010	<5.00	--	<5.00	<5.00	500	15
Arsenic	6010	<1.00	--	12.00	16.00 #	500	5
Barium	6010	140.00	--	120.00	93.00	10,000	100
Beryllium	6010	<0.10	--	<0.10	<0.10	75	0.75
Cadmium	6010	<0.10	--	<0.10	<0.10	100	1
Chromium (VI)	7196	<0.50	--	<0.50	<0.50	500	5
Chromium (total)	6010	31.00	--	31.00	34.00	2,500	5 **
Cobalt	6010	11.00	--	11.00	9.70	8,000	80
Copper	6010	15.00	--	14.00	14.00	2,500	25
Lead (total)	6010	<1.00	--	<1.00	<1.00	1,000	5
Mercury	7471	<0.01	--	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	--	<0.50	<0.50	3,500	350
Nickel	6010	12.00	--	15.00	17.00	2,000	20
Selenium	6010	<1.00	--	<1.00	<1.00	100	1
Silver	6010	<0.10	--	<0.10	<0.10	500	5
Thallium	6010	<5.00	--	<5.00	<5.00	700	7
Vanadium	6010	37.00	--	32.00	29.00	2,400	24
Zinc	6010	50.00	--	44.00	45.00	5,000	250
VOCs (1) (µg/kg)							
Tetrachloroethene	8260	270.00	--	3.20	<2.50		
Total Xylenes	8260	64.00	--	<2.50	<2.50		
1,2,4-Trimethylbenzene	8260	62.00	--	<2.50	<2.50		
p-Isopropyltoluene	8260	190.00	--	<2.50	<2.50		
Naphthalene	8260	60.00	--	<2.50	<2.50		
SVOCs (1) (µg/kg)							
bis (2-Ethylhexyl)Phthalate	8270	2,300.00	--	<100.00	<100.00		
Fluoranthene	8270	100.00	--	<100.00	<100.00		
2-Methylnaphthalene	8270	170.00	--	<100.00	<100.00		
Pyrene	8270	130.00	--	<100.00	<100.00		
Carbon Chain Range (mg/kg)	8015m	--	--	--	--		
PCBs (µg/kg)	8080	--	ND	--	--		

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

mg/L = milligrams per liter

-- = not analyzed

VOCs = Volatile Organic Compounds

SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons

PCBs = Polychlorinated biphenyls

ND = not detected

TTLc = California Total Threshold Limit Concentration

STLC = California Soluble Threshold Limit Concentration

(1) VOCs and SVOCs not listed were not detected

= Exceeds Screening Value

* Refer to Figure 4 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 4
Analytical Data Summary
Land Treatment Units BA-LTU-1 and BA-LTU-2 Samples*

Analyte	EPA Method	Sample Number and Collection Date		Regulatory Levels	
		BA-LTU-1-GS-1 From BA-LTU-1 12/29/97	BA-LTU-2-GS-1 From BA-LTU-2 12/29/97		
TRPH (mg/kg)	418.1	--	--		
Title 22 Metals (mg/kg)				TTL	STL
				(mg/kg)	(mg/L)
Antimony	6010	<5.00	<5.00	500	15
Arsenic	6010	3.80	3.10	500	5
Barium	6010	100.00	110.00	10,000	100
Beryllium	6010	<0.10	<0.10	75	0.75
Cadmium	6010	1.30	1.60	100	1
Chromium (VI)	7196	<0.50	<0.50	500	5
Chromium (total)	6010	15.00	15.00	2,500	5 **
Cobalt	6010	9.10	10.00	8,000	80
Copper	6010	17.00	15.00	2,500	25
Lead (total)	6010	3.60	4.20	1,000	5
Mercury	7471	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	<0.50	3,500	350
Nickel	6010	11.00	9.80	2,000	20
Selenium	6010	<1.00	<1.00	100	1
Silver	6010	<0.10	<0.10	500	5
Thallium	6010	<5.00	<5.00	700	7
Vanadium	6010	29.00	29.00	2,400	24
Zinc	6010	39.00	32.00	5,000	250
VOCs (µg/kg)	8260	ND	ND		
SVOCs (µg/kg)	8270	ND	ND		
Carbon Chain Range (mg/kg)	8015m	--	--		
PCBs (µg/kg)	8080	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = not detected
PCBs = Polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTL = California Total Threshold Limit Concentration
STL = California Soluble Threshold Limit Concentration

* Refer to Figure 5 for sample locations

** STL is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 5
Analytical Data Summary
Remedial Excavation B36-RE-1 Excavated Hot Spot Samples*

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth			Regulatory Levels	
		WL-GS-5-4' 6/23/97 E-38.A @ 4' bgs*	WL-GS-6-4' 6/23/97 F-38.A @ 4' bgs*	2BB-36-4-4 ** 4/2/97 D-38.B @ 4' bgs*		
TRPH (mg/kg)	418.1	260.00	340.00	<20.00		
TPHd (mg/kg)	8015M	<8.00	<8.00	--		
TPHg (mg/kg)	8015M	66.00	15.00	<1.00		
Title 22 Metals (mg/kg)					TTLc (mg/kg)	STLC (mg/L)
Antimony	6010	<5.00	<5.00	--	500	15
Arsenic	6010	<1.00	<1.00	--	500	5
Barium	6010	92.00	92.00	--	10,000	100
Beryllium	6010	<0.10	<0.10	--	75	0.75
Cadmium	6010	<0.10	<0.10	--	100	1
Chromium (VI)	7196	<0.50	<0.50	--	500	5
Chromium (total)	6010	25.00	25.00	--	2,500	5 ***
Cobalt	6010	6.90	7.40	--	8,000	80
Copper	6010	22.00	12.00	--	2,500	25
Lead (total)	6010	<1.00	<1.00	--	1,000	5
Mercury	7471	<0.01	<0.01	--	20	0.2
Molybdenum	6010	<0.50	<0.50	--	3,500	350
Nickel	6010	12.00	12.00	--	2,000	20
Selenium	6010	<1.00	<1.00	--	100	1
Silver	6010	<0.10	<0.10	--	500	5
Thallium	6010	<5.00	<5.00	--	700	7
Vanadium	6010	27.00	28.00	--	2,400	24
Zinc	6010	40.00	36.00	--	5,000	250
VOCs (1) (µg/kg)						
Trichloroethene	8260	<50.00	70.00	18.00		
1,1-Dichloroethene	8260	<50.00	<50.00	78.00		
SVOCs (1) (µg/kg)						
Benzo (a) Anthracene	8270	1,000.00	250.00	--		
Benzo (b) Fluoranthene	8270	1,400.00	370.00	--		
Benzo (k) Fluoranthene	8270	570.00	<250.00	--		
Benzo (g,h,i) Perylene	8270	960.00	<250.00	--		
Benzo (a) Pyrene	8270	1,300.00 #	310.00	--		
Chrysene	8270	1,200.00	300.00	--		
Dibenz (a,h) Anthracene	8270	250.00	<100.00	--		
Fluoranthene	8270	1,500.00	290.00	--		
Indeno(1,2,3-cd)Pyrene	8270	890.00	<250.00	--		
Phenanthrene	8270	390.00	<100.00	--		
Pyrene	8270	1,200.00	360.00	--		
Carbon Chain Range (mg/kg)						
Up to and including C12	8015m	11.00	3.40	--		
C13-C22	8015m	27.00	16.00	--		
C23 and higher	8015m	28.00	27.00	--		
PCBs (1) (µg/kg)						
PCB-1260	8080	<20.00	36.00	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
bgs = below ground surface
ND = not detected
PCBs = Polychlorinated biphenyls
= Exceeds Screening Value

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TPHd = Total Petroleum Hydrocarbons as diesel
TPHg = Total Petroleum Hydrocarbons as gasoline
(1) VOCs, SVOCs, and PCBs not listed were not detected
TTLc = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration

* Refer to Figure 12 for sample locations

** Kennedy/Jenks Consultants sample

*** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 6
Analytical Data Summary
Remedial Excavation B36-RE-1 Stockpile Samples*

		Sample Number and Collection Date						
		B36-RE1-SP1 9/4/97	B36-RE1-SP2 9/9/97	B36-RE1-SP3 9/11/97	B36-RE1-SP4 9/30/97	B36-RE1-SP5 9/30/97		
Analyte	EPA Method							
TRPH (mg/kg)	418.1	19.00	<8.00	--	33.00	38.00	Regulatory Levels	
							TTLc (mg/kg)	STLC (mg/L)
Title 22 Metals (mg/kg)								
Antimony	6010	<5.00	<5.00	--	<5.00	<5.00	500	15
Arsenic	6010	<1.00	<1.00	--	5.70	7.30	500	5
Barium	6010	93.00	110.00	--	100.00	130.00	10,000	100
Beryllium	6010	<0.10	<0.10	--	<0.10	<0.10	75	0.75
Cadmium	6010	<0.10	<0.10	--	<0.10	<0.10	100	1
Chromium (VI)	7196	<0.50	<0.50	--	<0.50	<0.50	500	5
Chromium (total)	6010	23.00	22.00	--	25.00	25.00	2,500	5 **
Cobalt	6010	8.60	7.40	--	5.80	7.90	8,000	80
Copper	6010	11.00	12.00	--	9.80	15.00	2,500	25
Lead (total)	6010	<1.00	<1.00	--	<1.00	<1.00	1,000	5
Mercury	7471	<0.01	<0.01	--	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	<0.50	--	<0.50	<0.50	3,500	350
Nickel	6010	8.00	9.70	--	8.60	12.00	2,000	20
Selenium	6010	<1.00	<1.00	--	<1.00	<1.00	100	1
Silver	6010	<0.10	<0.10	--	<0.10	<0.10	500	5
Thallium	6010	<5.00	<5.00	--	<5.00	<5.00	700	7
Vanadium	6010	11.00	28.00	--	30.00	30.00	2,400	24
Zinc	6010	70.00	34.00	--	36.00	38.00	5,000	250
VOCs (1) (ug/kg)								
Trichloroethene	8260	<2.50	2.70	--	<2.50	<2.50		
SVOCs (ug/kg)	8270	ND	ND	ND	ND	ND		
Carbon Chain Range (mg/kg)	8015m	--	--	--	--	--		
PCBs (ug/kg)	8080	--	--	--	--	ND		

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

mg/L = milligrams per liter

-- = not analyzed

VOCs = Volatile Organic Compounds

SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons

PCBs = Polychlorinated biphenyls

ND = not detected

TTLc = California Total Threshold Limit Concentration

STLC = California Soluble Threshold Limit Concentration

(1) VOCs not listed were not detected

* Refer to Figure 6 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 7
Analytical Data Summary
Land Treatment Unit B36-LTU Samples*

Analyte	EPA Method	Sample Number and Collection Date		Regulatory Levels	
		B36LTU-GS-1 11/21/97	B36LTU-GS-2 11/21/97		
TRPH (mg/kg)	418.1	--	--		
Title 22 Metals (mg/kg)				TTL	STL
				(mg/kg)	(mg/L)
Antimony	6010	--	--	500	15
Arsenic	6010	--	--	500	5
Barium	6010	--	--	10,000	100
Beryllium	6010	--	--	75	0.75
Cadmium	6010	--	--	100	1
Chromium (VI)	7196	--	--	500	5
Chromium (total)	6010	--	--	2,500	5 **
Cobalt	6010	--	--	8,000	80
Copper	6010	--	--	2,500	25
Lead (total)	6010	--	--	1,000	5
Mercury	7471	--	--	20	0.2
Molybdenum	6010	--	--	3,500	350
Nickel	6010	--	--	2,000	20
Selenium	6010	--	--	100	1
Silver	6010	--	--	500	5
Thallium	6010	--	--	700	7
Vanadium	6010	--	--	2,400	24
Zinc	6010	--	--	5,000	250
VOCs (µg/kg)	8260	ND	ND		
SVOCs (µg/kg)	8270	--	--		
Carbon Chain Range (mg/kg)	8015m	--	--		
PCBs (µg/kg)	8080	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = not detected
PCBs = Polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTL = California Total Threshold Limit Concentration
STL = California Soluble Threshold Limit Concentration

* Refer to Figure 7 for sample locations

** STL is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 8
Analytical Data Summary
Building 37 East Clarifiers Fill Soil Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth			Regulatory Levels	
		Clarifier 1		Clarifier 2		
		B37C1-GS-1-3' 9/18/97 A.1/A.2-20 @ 3' bgs*	B37C1-GS-2-10.5' 9/18/97 A.1/A.2-20 @ 10.5' bgs*	B37C2-GS-1-3' 9/18/97 A.1/A.2-21.5 @ 3' bgs*	TTLc (mg/kg)	STLC (mg/L)
TRPH (mg/kg)	418.1	18.00	23.00	1,300.00		
Title 22 Metals (mg/kg)						
Antimony	6010	<5.00	<5.00	<5.00	500	15
Arsenic	6010	<1.00	18.00 #	11.00	500	5
Barium	6010	66.00	2.60	82.00	10,000	100
Beryllium	6010	<0.10	<0.10	<0.10	75	0.75
Cadmium	6010	<0.10	<0.10	<0.10	100	1
Chromium (VI)	7196	<0.50	<0.50	<0.50	500	5
Chromium (total)	6010	17.00	160.00 (2)(3)	21.00	2,500	5 **
Cobalt	6010	5.30	8.80	6.40	8,000	80
Copper	6010	8.00	300.00 (4)	13.00	2,500	25
Lead (total)	6010	<1.00	38.00	3.60	1,000	5
Mercury	7471	<0.01	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	13.00	<0.50	3,500	350
Nickel	6010	6.60	79.00	9.10	2,000	20
Selenium	6010	<1.00	<1.00	<1.00	100	1
Silver	6010	<0.10	<0.10	<0.10	500	5
Thallium	6010	<5.00	<5.00	<5.00	700	7
Vanadium	6010	20.00	8.80	22.00	2,400	24
Zinc	6010	25.00	53.00	33.00	5,000	250
VOCs (1) (µg/kg)						
Benzene	8260	<50.00	4.60	<2.50		
trans-1,2-Dichloroethene	8260	270.00	<2.50	<2.50		
Ethylbenzene	8260	<50.00	3.00	<2.50		
Toluene	8260	<50.00	7.50	<2.50		
Trichloroethene	8260	2,700.00	<2.50	<2.50		
Total Xylenes	8260	<50.00	4.60	<2.50		
cis-1,2-Dichloroethene	8260	500.00	<2.50	<2.50		
SVOCs (1) (µg/kg)						
Benzo (a) Anthracene	8270	<100.00	<100.00	300.00		
Benzo (b) Fluoranthene	8270	<250.00	<250.00	550.00		
Benzo (k) Fluoranthene	8270	<250.00	<250.00	380.00		
Benzo (g,h,i) Perylene	8270	<250.00	<250.00	340.00		
Benzo (a) Pyrene	8270	<250.00	<250.00	500.00		
bis (2-Ethylhexyl)Phthalate	8270	<100.00	2,100.00	700.00		
Chrysene	8270	<100.00	<100.00	610.00		
Fluoranthene	8270	<100.00	<100.00	640.00		
Indeno(1,2,3-cd)Pyrene	8270	<250.00	<250.00	350.00		
Phenanthrene	8270	<100.00	<100.00	190.00		
Pyrene	8270	<100.00	<100.00	510.00		
Carbon Chain Range (mg/kg)						
	8015m	--	--	--		
PCBs (1) (µg/kg)						
PCB-1254	8080	--	120.00	<20.00		

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

µg/L = micrograms per liter

-- = not analyzed

bgs = below ground surface

ND = not detected

PCBs = Polychlorinated biphenyls

VOCs = Volatile Organic Compounds

= Exceeds Screening Value

SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons

TTLc = California Total Threshold Limit Concentration

STLC = California Soluble Threshold Limit Concentration

(1) VOCs, SVOCs, and PCBs not listed were not detected

(2) Waste Extraction Test performed on this sample. Result was 12 mg/L.

(3) TCLP analysis performed on this sample. Result was <0.1 mg/L.

(4) Waste Extraction Test performed on this sample. Result was <0.1 mg/L.

* Refer to Figure 13 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 9
Analytical Data Summary
Remedial Excavation B37CL-RE-1 Excavated Hot Spot Samples
Page 1 of 5

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth				Regulatory Levels	
		B37C1-GS-3-5' 9/24/97 A.1/A.2-19.5 @ 5' bgs*	B37C1-GS-4-5' 9/24/97 A.2-20 @ 5' bgs*	B37C1-GS-5-5' 9/24/97 A.1/A.2-20.5 @ 5' bgs*	B37C1-GS-6-5' 9/24/97 A.1-20 @ 5' bgs*		
TRPH (mg/kg)	418.1	22.00	<8.00	21.00	20.00		
TPHd (mg/kg)	8015M	--	--	--	--		
TPHg (mg/kg)	8015M	--	--	--	--		
Title 22 Metals (mg/kg)							
Antimony	6010	<5.00	<5.00	<5.00	<5.00	500	15
Arsenic	6010	<1.00	<1.00	<1.00	49.00 #	500	5
Barium	6010	110.00	110.00	110.00	110.00	10,000	100
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	75	0.75
Cadmium	6010	<0.10	<0.10	<0.10	<0.10	100	1
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	500	5
Chromium (total)	6010	27.00	24.00	32.00	28.00	2,500	5 **
Cobalt	6010	8.00	7.10	8.90	7.90	8,000	80
Copper	6010	12.00	12.00	19.00	15.00	2,500	25
Lead (total)	6010	<1.00	<1.00	<1.00	<1.00	1,000	5
Mercury	7471	<0.01	<0.01	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	<0.50	<0.50	<0.50	3,500	350
Nickel	6010	11.00	12.00	14.00	12.00	2,000	20
Selenium	6010	<1.00	<1.00	<1.00	<1.00	100	1
Silver	6010	<0.10	<0.10	<0.10	<0.10	500	5
Thallium	6010	<5.00	<5.00	<5.00	<5.00	700	7
Vanadium	6010	31.00	26.00	37.00	34.00	2,400	24
Zinc	6010	37.00	32.00	85.00	44.00	5,000	250
VOCs (1) (µg/kg)							
1,1-Dichloroethane	8260	<2.50	10.00	<2.50	4.50		
1,1-Dichloroethene	8260	<2.50	<2.50	<2.50	10.00		
Tetrachloroethene	8260	<2.50	<2.50	<2.50	<2.50		
Toluene	8260	<2.50	<2.50	<2.50	<2.50		
1,1,1-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50		
Trichloroethene	8260	<2.50	<2.50	<2.50	<2.50		
Total Xylenes	8260	<2.50	<2.50	<2.50	<2.50		
cis-1,2-Dichloroethene	8260	<2.50	<2.50	<2.50	<2.50		
Isopropylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
n-Propylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
1,3,5-Trimethylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
tert-Butylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
1,2,4-Trimethylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
p-Isopropyltoluene	8260	<2.50	<2.50	<2.50	<2.50		
Naphthalene	8260	<2.50	<2.50	<2.50	<2.50		
SVOCs (1) (µg/kg)							
Benzo (a) Anthracene	8270	<100.00	<100.00	<100.00	460.00		
Benzo (b) Fluoranthene	8270	<250.00	<250.00	<250.00	530.00		
Benzo (k) Fluoranthene	8270	<250.00	<250.00	<250.00	270.00		
Benzo (g,h,i) Perylene	8270	<250.00	<250.00	<250.00	320.00		
Benzo (a) Pyrene	8270	<250.00	<250.00	<250.00	410.00		
bis (2-Ethylhexyl)Phthalate	8270	<100.00	<100.00	<100.00	<100.00		
4-Chloro-3-methylphenol	8270	<100.00	<100.00	<100.00	<100.00		
Chrysene	8270	110.00	<100.00	150.00	410.00		
Fluoranthene	8270	100.00	<100.00	130.00	560.00		
Indeno(1,2,3-cd)Pyrene	8270	<250.00	<250.00	<250.00	250.00		
2-Methylnaphthalene	8270	<100.00	<100.00	<100.00	<100.00		
Phenanthrene	8270	<100.00	<100.00	<100.00	160.00		
Pyrene	8270	140.00	<100.00	160.00	590.00		
Carbon Chain Range (mg/kg)							
Up to and including C12	8015m	--	--	--	--		
C13-C22	8015m	--	--	--	--		
C23 and higher	8015m	--	--	--	--		
PCBs (µg/kg)	8080	ND	--	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = not detected

bgs = below ground surface
PCBs = Polychlorinated biphenyls
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
= Exceeds Screening Value

TRPH = Total Recoverable Petroleum Hydrocarbons
TPHd = Total Petroleum Hydrocarbons as diesel
TPHg = Total Petroleum Hydrocarbons as gasoline
(1) VOCs and SVOCs not listed were not detected
TTLc = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration

* Refer to Figure 14 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 9
Analytical Data Summary
Remedial Excavation B37CL-RE-1 Excavated Hot Spot Samples
Page 2 of 5

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth				Regulatory Levels	
		B37C1-GS-7-11' 9/25/97 A.1/A.2-20.5 @ 11' bgs*	B37C2-GS-2-2' 9/29/97 A.1/A.2-21 @ 2' bgs*	B37C2-GS-3-2' 9/29/97 A.2-21.5 @ 2' bgs*	B37C2-GS-4-2' 9/29/97 A.1/A.2-21.5 @ 2' bgs*		
TRPH (mg/kg)	418.1	<8.00	<8.00	2,200.00	<8.00		
TPHd (mg/kg)	8015M	--	--	--	--		
TPHg (mg/kg)	8015M	--	--	--	--		
Title 22 Metals (mg/kg)							
Antimony	6010	<5.00	<5.00	<5.00	<5.00	500	15
Arsenic	6010	<1.00	18.00 #	14.00 #	7.60	500	5
Barium	6010	100.00	88.00	100.00	97.00	10,000	100
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	75	0.75
Cadmium	6010	<0.10	<0.10	<0.10	<0.10	100	1
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	500	5
Chromium (total)	6010	30.00	20.00	24.00	23.00	2,500	5 **
Cobalt	6010	8.60	6.50	7.00	7.20	8,000	80
Copper	6010	19.00	11.00	12.00	11.00	2,500	25
Lead (total)	6010	<1.00	<1.00	<1.00	<1.00	1,000	5
Mercury	7471	<0.01	<0.01	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	<0.50	2.30	<0.50	3,500	350
Nickel	6010	16.00	8.60	10.00	11.00	2,000	20
Selenium	6010	<1.00	<1.00	<1.00	<1.00	100	1
Silver	6010	<0.10	<0.10	<0.10	<0.10	500	5
Thallium	6010	<5.00	<5.00	<5.00	<5.00	700	7
Vanadium	6010	35.00	26.00	27.00	25.00	2,400	24
Zinc	6010	54.00	32.00	35.00	29.00	5,000	250
VOCs (1) (µg/kg)							
1,1-Dichloroethane	8260	<2.50	<2.50	<2.50	<2.50		
1,1-Dichloroethene	8260	<2.50	<2.50	<2.50	<2.50		
Tetrachloroethene	8260	<2.50	<2.50	<2.50	<2.50		
Toluene	8260	<2.50	<2.50	<2.50	<2.50		
1,1,1-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50		
Trichloroethene	8260	<2.50	4.60	<2.50	<2.50		
Total Xylenes	8260	<2.50	<2.50	<2.50	<2.50		
cis-1,2-Dichloroethene	8260	<2.50	<2.50	<2.50	<2.50		
Isopropylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
n-Propylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
1,3,5-Trimethylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
tert-Butylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
1,2,4-Trimethylbenzene	8260	<2.50	<2.50	<2.50	<2.50		
p-Isopropyltoluene	8260	<2.50	<2.50	<2.50	<2.50		
Naphthalene	8260	<2.50	<2.50	<2.50	<2.50		
SVOCs (1) (µg/kg)							
Benzo (a) Anthracene	8270	<100.00	<100.00	120.00	<100.00		
Benzo (b) Fluoranthene	8270	<250.00	<250.00	<250.00	<250.00		
Benzo (k) Fluoranthene	8270	<250.00	<250.00	<250.00	<250.00		
Benzo (g,h,i) Perylene	8270	<250.00	<250.00	<250.00	<250.00		
Benzo (a) Pyrene	8270	<250.00	<250.00	<250.00	<250.00		
bis (2-Ethylhexyl)Phthalate	8270	<100.00	<100.00	<100.00	420.00		
4-Chloro-3-methylphenol	8270	<100.00	<100.00	<100.00	<100.00		
Chrysene	8270	<100.00	<100.00	230.00	<100.00		
Fluoranthene	8270	<100.00	<100.00	200.00	<100.00		
Indeno(1,2,3-cd)Pyrene	8270	<250.00	<250.00	<250.00	<250.00		
2-Methylnaphthalene	8270	<100.00	<100.00	<100.00	<100.00		
Phenanthrene	8270	<100.00	<100.00	<100.00	<100.00		
Pyrene	8270	<100.00	<100.00	230.00	<100.00		
Carbon Chain Range (mg/kg)							
Up to and including C12	8015m	--	--	--	--		
C13-C22	8015m	--	--	--	--		
C23 and higher	8015m	--	--	--	--		
PCBs (µg/kg)	8080	--	--	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = not detected

bgs = below ground surface
PCBs = Polychlorinated biphenyls
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
= Exceeds Screening Value

TRPH = Total Recoverable Petroleum Hydrocarbons
TPHd = Total Petroleum Hydrocarbons as diesel
TPHg = Total Petroleum Hydrocarbons as gasoline
(1) VOCs and SVOCs not listed were not detected
TTLc = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration

* Refer to Figure 14 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 9
Analytical Data Summary
Remedial Excavation B37CL-RE-1 Excavated Hot Spot Samples
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Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth				Regulatory Levels	
		B37C2-GS-5-2' 9/29/97 A.1-21.5 @ 2' bgs*	B37C2-GS-6-4' 9/29/97 A.1/A.2-21.5 @ 4' bgs*	B37C3-GS-1-5' 10/23/97 A.2/A.3-19 @ 5' bgs*	B37C3-GS-2-5' 10/23/97 A.2-18.5 @ 5' bgs*		
TRPH (mg/kg)	418.1	<8.00	<8.00	15,000.00	25,000.00		
TPHd (mg/kg)	8015M	--	--	--	--		
TPHg (mg/kg)	8015M	--	--	--	--		
Title 22 Metals (mg/kg)						TTLc (mg/kg)	STLC (mg/L)
Antimony	6010	<5.00	<5.00	<5.00	<5.00	500	15
Arsenic	6010	30.00 #	5.50	<1.00	<1.00	500	5
Barium	6010	99.00	100.00	120.00	94.00	10,000	100
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	75	0.75
Cadmium	6010	<0.10	<0.10	<0.10	<0.10	100	1
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	500	5
Chromium (total)	6010	21.00	19.00	23.00	17.00	2,500	5 **
Cobalt	6010	7.30	6.80	7.10	3.80	8,000	80
Copper	6010	12.00	11.00	10.00	11.00	2,500	25
Lead (total)	6010	<1.00	<1.00	<1.00	1.40	1,000	5
Mercury	7471	<0.01	<0.01	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	<0.50	<0.50	<0.50	3,500	350
Nickel	6010	9.70	6.60	10.00	7.40	2,000	20
Selenium	6010	<1.00	<1.00	<1.00	<1.00	100	1
Silver	6010	<0.10	<0.10	<0.10	<0.10	500	5
Thallium	6010	<5.00	<5.00	<5.00	<5.00	700	7
Vanadium	6010	27.00	22.00	27.00	20.00	2,400	24
Zinc	6010	33.00	42.00	33.00	82.00	5,000	250
VOCs (1) (µg/kg)							
1,1-Dichloroethane	8260	<2.50	3.00	800.00	840.00		
1,1-Dichloroethene	8260	<2.50	<2.50	<50.00	<50.00		
Tetrachloroethene	8260	<2.50	<2.50	160.00	490.00		
Toluene	8260	<2.50	<2.50	75.00	120.00		
1,1,1-Trichloroethane	8260	<2.50	<2.50	440.00	150.00		
Trichloroethene	8260	<2.50	8.60	280.00	<50.00		
Total Xylenes	8260	<2.50	<2.50	130.00	150.00		
cis-1,2-Dichloroethene	8260	<2.50	7.00	<50.00	<50.00		
Isopropylbenzene	8260	<2.50	<2.50	<50.00	100.00		
n-Propylbenzene	8260	<2.50	<2.50	98.00	210.00		
1,3,5-Trimethylbenzene	8260	<2.50	<2.50	450.00	1,200.00		
tert-Butylbenzene	8260	<2.50	<2.50	220.00	670.00		
1,2,4-Trimethylbenzene	8260	<2.50	<2.50	1,600.00	5,000.00		
p-Isopropyltoluene	8260	<2.50	<2.50	110.00	220.00		
Naphthalene	8260	<2.50	<2.50	170.00	360.00		
SVOCs (1) (µg/kg)							
Benzo (a) Anthracene	8270	<100.00	<100.00	<500.00	<500.00		
Benzo (b) Fluoranthene	8270	<250.00	<250.00	<1,250.00	<1,250.00		
Benzo (k) Fluoranthene	8270	<250.00	<250.00	<1,250.00	<1,250.00		
Benzo (g,h,i) Perylene	8270	<250.00	<250.00	<1,250.00	<1,250.00		
Benzo (a) Pyrene	8270	<250.00	<250.00	<1,250.00	<1,250.00		
bis (2-Ethylhexyl)Phthalate	8270	1,900.00	<100.00	<500.00	<500.00		
4-Chloro-3-methylphenol	8270	<100.00	<100.00	19,000.00	<500.00		
Chrysene	8270	<100.00	<100.00	<500.00	<500.00		
Fluoranthene	8270	<100.00	<100.00	<500.00	<500.00		
Indeno(1,2,3-cd)Pyrene	8270	<250.00	<250.00	<1,250.00	<1,250.00		
2-Methylnaphthalene	8270	<100.00	<100.00	<500.00	1,300.00		
Phenanthrene	8270	<100.00	<100.00	<500.00	<500.00		
Pyrene	8270	<100.00	<100.00	<500.00	<500.00		
Carbon Chain Range (mg/kg)							
Up to and including C12	8015m	--	--	--	--		
C13-C22	8015m	--	--	--	--		
C23 and higher	8015m	--	--	--	--		
PCBs (µg/kg)							
	8080	--	--	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = not detected

bgs = below ground surface
PCBs = Polychlorinated biphenyls
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
= Exceeds Screening Value

TRPH = Total Recoverable Petroleum Hydrocarbons
TPHd = Total Petroleum Hydrocarbons as diesel
TPHg = Total Petroleum Hydrocarbons as gasoline
(1) VOCs and SVOCs not listed were not detected
TTLc = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration

* Refer to Figure 14 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 9
Analytical Data Summary
Remedial Excavation B37CL-RE-1 Excavated Hot Spot Samples
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Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth				Regulatory Levels	
		B37C3-GS-3-5' 10/23/97 A.2-19 @ 5' bgs*	B37C3-GS-4-5' 10/23/97 A.2-19.5 @ 5' bgs*	B37C3-GS-1A-5' 11/21/97 A.2/A.3-19 @ 5' bgs*	B37C3-GS-2A-5' 11/21/97 A.2-18.5 @ 5' bgs*		
TRPH (mg/kg)	418.1	22,000.00	21,000.00	11,000.00	32,000.00		
TPHd (mg/kg)	8015M	--	--	--	--		
TPHg (mg/kg)	8015M	--	--	--	--		
Title 22 Metals (mg/kg)						TTLc (mg/kg)	STLC (mg/L)
Antimony	6010	<5.00	<5.00	--	--	500	15
Arsenic	6010	<1.00	<1.00	--	--	500	5
Barium	6010	140.00	130.00	--	--	10,000	100
Beryllium	6010	<0.10	<0.10	--	--	75	0.75
Cadmium	6010	<0.10	<0.10	--	--	100	1
Chromium (VI)	7196	<0.50	<0.50	--	--	500	5
Chromium (total)	6010	5.60	8.00	--	--	2,500	5 **
Cobalt	6010	1.10	2.20	--	--	8,000	80
Copper	6010	3.50	5.20	--	--	2,500	25
Lead (total)	6010	2.30	<1.00	--	--	1,000	5
Mercury	7471	<0.01	<0.01	--	--	20	0.2
Molybdenum	6010	<0.50	<0.50	--	--	3,500	350
Nickel	6010	4.10	5.00	--	--	2,000	20
Selenium	6010	<1.00	<1.00	--	--	100	1
Silver	6010	<0.10	<0.10	--	--	500	5
Thallium	6010	<5.00	<5.00	--	--	700	7
Vanadium	6010	11.00	12.00	--	--	2,400	24
Zinc	6010	20.00	32.00	--	--	5,000	250
VOCs (1) (µg/kg)							
1,1-Dichloroethane	8260	<50.00	61.00	--	--		
1,1-Dichloroethene	8260	<50.00	<50.00	--	--		
Tetrachloroethene	8260	50.00	110.00	--	--		
Toluene	8260	<50.00	<50.00	--	--		
1,1,1-Trichloroethane	8260	<50.00	170.00	--	--		
Trichloroethene	8260	<50.00	74.00	--	--		
Total Xylenes	8260	<50.00	<50.00	--	--		
cis-1,2-Dichloroethene	8260	<50.00	<50.00	--	--		
Isopropylbenzene	8260	<50.00	<50.00	--	--		
n-Propylbenzene	8260	<50.00	<50.00	--	--		
1,3,5-Trimethylbenzene	8260	150.00	<50.00	--	--		
tert-Butylbenzene	8260	61.00	<50.00	--	--		
1,2,4-Trimethylbenzene	8260	470.00	61.00	--	--		
p-Isopropyltoluene	8260	<50.00	<50.00	--	--		
Naphthalene	8260	58.00	<50.00	--	--		
SVOCs (1) (µg/kg)							
Benzo (a) Anthracene	8270	<500.00	<500.00	--	--		
Benzo (b) Fluoranthene	8270	<1,250.00	<1,250.00	--	--		
Benzo (k) Fluoranthene	8270	<1,250.00	<1,250.00	--	--		
Benzo (g,h,i) Perylene	8270	<1,250.00	<1,250.00	--	--		
Benzo (a) Pyrene	8270	<1,250.00	<1,250.00	--	--		
bis (2-Ethylhexyl)Phthalate	8270	<500.00	<500.00	--	--		
4-Chloro-3-methylphenol	8270	<500.00	<500.00	--	--		
Chrysene	8270	<500.00	<500.00	--	--		
Fluoranthene	8270	<500.00	<500.00	--	--		
Indeno(1,2,3-cd)Pyrene	8270	<1,250.00	<1,250.00	--	--		
2-Methylnaphthalene	8270	<500.00	<500.00	--	--		
Phenanthrene	8270	<500.00	<500.00	--	--		
Pyrene	8270	<500.00	<500.00	--	--		
Carbon Chain Range (mg/kg)							
Up to and including C12	8015m	--	--	17.00	100.00		
C13-C22	8015m	--	--	2,500.00	5,000.00		
C23 and higher	8015m	--	--	5,400.00	8,100.00		
PCBs (µg/kg)	8080	--	--	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = not detected

bgs = below ground surface
PCBs = Polychlorinated biphenyls
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
= Exceeds Screening Value

TRPH = Total Recoverable Petroleum Hydrocarbons
TPHd = Total Petroleum Hydrocarbons as diesel
TPHg = Total Petroleum Hydrocarbons as gasoline
(1) VOCs and SVOCs not listed were not detected
TTLc = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration

* Refer to Figure 14 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 9
Analytical Data Summary
Remedial Excavation B37CL-RE-1 Excavated Hot Spot Samples
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Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth				Regulatory Levels	
		B37C3-GS-3A-5' 11/21/97 A.2-19 @ 5' bgs*	B37C3-GS-4A-5' 11/21/97 A.2-19.5 @ 5' bgs*	WL-GS-9-4' 9/12/97 A.1/A.2-18.5 @ 4' bgs*	WL-GS-10-4' 9/12/97 A.1/A.2-19.5 @ 4' bgs*		
TRPH (mg/kg)	418.1	21,000.00	33,000.00	6,600.00	7,900.00		
TPHd (mg/kg)	8015M	--	--	<8.00	<8.00		
TPHg (mg/kg)	8015M	--	--	43.00	<5.00		
Title 22 Metals (mg/kg)						TTLc (mg/kg)	STLC (mg/L)
Antimony	6010	--	--	<5.00	<5.00	500	15
Arsenic	6010	--	--	13.00	5.40	500	5
Barium	6010	--	--	89.00	41.00	10,000	100
Beryllium	6010	--	--	<0.10	<0.10	75	0.75
Cadmium	6010	--	--	<0.10	<0.10	100	1
Chromium (VI)	7196	--	--	<0.50	<0.50	500	5
Chromium (total)	6010	--	--	22.00	12.00	2,500	5 **
Cobalt	6010	--	--	7.50	3.00	8,000	80
Copper	6010	--	--	14.00	5.50	2,500	25
Lead (total)	6010	--	--	<1.00	<1.00	1,000	5
Mercury	7471	--	--	<0.01	<0.01	20	0.2
Molybdenum	6010	--	--	<0.50	<0.50	3,500	350
Nickel	6010	--	--	11.00	5.30	2,000	20
Selenium	6010	--	--	<1.00	<1.00	100	1
Silver	6010	--	--	<0.10	<0.10	500	5
Thallium	6010	--	--	<5.00	<5.00	700	7
Vanadium	6010	--	--	25.00	14.00	2,400	24
Zinc	6010	--	--	52.00	23.00	5,000	250
VOCs (l) (µg/kg)							
1,1-Dichloroethane	8260	--	--	3.90	<2.50		
1,1-Dichloroethene	8260	--	--	<2.50	<2.50		
Tetrachloroethene	8260	--	--	31.00	52.00		
Toluene	8260	--	--	3.20	<2.50		
1,1,1-Trichloroethane	8260	--	--	<2.50	<2.50		
Trichloroethene	8260	--	--	<2.50	<2.50		
Total Xylenes	8260	--	--	<2.50	<2.50		
cis-1,2-Dichloroethene	8260	--	--	<2.50	<2.50		
Isopropylbenzene	8260	--	--	<2.50	<2.50		
n-Propylbenzene	8260	--	--	4.10	<2.50		
1,3,5-Trimethylbenzene	8260	--	--	8.10	6.30		
tert-Butylbenzene	8260	--	--	<2.50	<2.50		
1,2,4-Trimethylbenzene	8260	--	--	26.00	19.00		
p-Isopropyltoluene	8260	--	--	<2.50	2.50		
Naphthalene	8260	--	--	4.10	<2.50		
SVOCs (l) (µg/kg)							
Benzo (a) Anthracene	8270	--	--	<400.00	<100.00		
Benzo (b) Fluoranthene	8270	--	--	<1,000.00	<250.00		
Benzo (k) Fluoranthene	8270	--	--	<1,000.00	<250.00		
Benzo (g,h,i) Perylene	8270	--	--	<1,000.00	<250.00		
Benzo (a) Pyrene	8270	--	--	<1,000.00	<250.00		
bis (2-Ethylhexyl)Phthalate	8270	--	--	42,000.00	2,300.00		
4-Chloro-3-methylphenol	8270	--	--	<400.00	<100.00		
Chrysene	8270	--	--	<400.00	<100.00		
Fluoranthene	8270	--	--	<400.00	<100.00		
Indeno(1,2,3-cd)Pyrene	8270	--	--	<1,000.00	<250.00		
2-Methylnaphthalene	8270	--	--	<400.00	<100.00		
Phenanthrene	8270	--	--	<400.00	<100.00		
Pyrene	8270	--	--	<400.00	<100.00		
Carbon Chain Range (mg/kg)							
Up to and including C12	8015m	29.00	55.00	8.40	<0.10		
C13-C22	8015m	2,400.00	4,200.00	1,100.00	130.00		
C23 and higher	8015m	4,500.00	12,000.00	2,600.00	320.00		
PCBs (µg/kg)	8080	--	--	ND	ND		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = not detected

bgs = below ground surface
PCBs = Polychlorinated biphenyls
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
= Exceeds Screening Value

TRPH = Total Recoverable Petroleum Hydrocarbons
TPHd = Total Petroleum Hydrocarbons as diesel
TPHg = Total Petroleum Hydrocarbons as gasoline
(1) VOCs and SVOCs not listed were not detected
TTLc = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration

* Refer to Figure 14 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 10
Analytical Data Summary
Remedial Excavation B37CL-RE-1 Stockpile Sample*

		Sample Number and Collection Date			
		B37CL-RE-SP1			
Analyte	EPA Method	10/15/97			
TRPH (mg/kg)	418.1	130.00		Regulatory Levels	
				TTLC	STLC
Title 22 Metals (mg/kg)				(mg/kg)	(mg/L)
Antimony	6010	<5.00		500	15
Arsenic	6010	11.00		500	5
Barium	6010	110.00		10,000	100
Beryllium	6010	<0.10		75	0.75
Cadmium	6010	<0.10		100	1
Chromium (VI)	7196	<0.50		500	5
Chromium (total)	6010	30.00		2,500	5 **
Cobalt	6010	10.00		8,000	80
Copper	6010	15.00		2,500	25
Lead (total)	6010	<1.00		1,000	5
Mercury	7471	<0.01		20	0.2
Molybdenum	6010	2.20		3,500	350
Nickel	6010	14.00		2,000	20
Selenium	6010	<1.00		100	1
Silver	6010	<0.10		500	5
Thallium	6010	<5.00		700	7
Vanadium	6010	30.00		2,400	24
Zinc	6010	62.00		5,000	250
VOCs (µg/kg)	8260	ND			
SVOCs (µg/kg)	8270	ND			
Carbon Chain Range (mg/kg)	8015m	--			
PCBs (µg/kg)	8080	--			

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

mg/L = milligrams per liter

-- = not analyzed

bgs = below ground surface

ND = not detected

PCBs = Polychlorinated biphenyls

VOCs = Volatile Organic Compounds

SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons

TTL = California Total Threshold Limit Concentration

STL = California Soluble Threshold Limit Concentration

* Refer to Figure 8 for sample location

** STL is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 11
Analytical Data Summary
Land Treatment Unit B37CL-LTU-1 Sample*

		Sample Number and Collection Date			
		B37CL-LTU1-GS-1			
		12/31/97			
Analyte	EPA Method				
TRPH (mg/kg)	418.1	--		Regulatory Levels	
				TTLC	STLC
Title 22 Metals (mg/kg)				(mg/kg)	(mg/L)
Antimony	6010	<5.00		500	15
Arsenic	6010	4.40		500	5
Barium	6010	100.00		10,000	100
Beryllium	6010	<0.10		75	0.75
Cadmium	6010	1.10		100	1
Chromium (VI)	7196	<0.50		500	5
Chromium (total)	6010	14.00		2,500	5 **
Cobalt	6010	8.00		8,000	80
Copper	6010	16.00		2,500	25
Lead (total)	6010	4.50		1,000	5
Mercury	7471	<0.01		20	0.2
Molybdenum	6010	<0.50		3,500	350
Nickel	6010	9.80		2,000	20
Selenium	6010	<1.00		100	1
Silver	6010	<0.10		500	5
Thallium	6010	<5.00		700	7
Vanadium	6010	25.00		2,400	24
Zinc	6010	41.00		5,000	250
VOCs (µg/kg)	8260	ND			
SVOCs (1) (µg/kg)					
Bis(2-ethylhexyl)phthalate	8270	270.00			
2-Methylnaphthalene	8270	590.00			
Phenanthrene	8270	250.00			
Pyrene	8270	120.00			
Carbon Chain Range (mg/kg)	8015m	--			
PCBs (µg/kg)	8080	--			

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
ND = not detected
PCBs = Polychlorinated biphenyls

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
TRPH = Total Recoverable Petroleum Hydrocarbons
TTLIC = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration
(1) SVOCs not listed were not detected

* Refer to Figure 9 for sample location

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 13
Analytical Data Summary
Remedial Excavation BA-RE-1 Confirmation Samples

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth								Regulatory Levels	TTLC (mg/kg)	STLC (mg/L)
		BA-GS-2-8' 10/1/97 A-4 @ 8' bgs*	BA-GS-3-5.5' 10/1/97 B/C-4 @ 5.5' bgs*	BA-GS-4-3.5' 10/1/97 D-4 @ 3.5' bgs*	BA-GS-5-3' 10/2/97 East of A-4 @ 3' bgs*	BA-GS-6-3' 10/2/97 A-5 @ 3' bgs*	BA-GS-7-3' 10/2/97 B/C-5 @ 3' bgs*	BA-GS-8-3.5' 10/2/97 B/C-3 @ 3.5' bgs*	BA-GS-9-3.5' 10/2/97 A-3 @ 3.5' bgs*			
TRPH (mg/kg)	418.1	<8.00	<8.00	17.00	<8.00	<8.00	<8.00	<8.00	<8.00			
Title 22 Metals (mg/kg)												
Antimony	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00		500	15
Arsenic	6010	<1.00	<1.00	<1.00	7.50	11.00	7.90	6.00	8.00		500	5
Barium	6010	110.00	78.00	340.00	91.00	170.00	140.00	120.00	100.00		10,000	100
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		75	0.75
Cadmium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		100	1
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		500	5
Chromium (total)	6010	36.00	30.00	42.00	35.00	61.00 (2)(3)	39.00	34.00	32.00		2,500	5 **
Cobalt	6010	9.80	8.40	18.00	10.00	17.00	14.00	11.00	11.00		8,000	80
Copper	6010	23.00	15.00	13.00	14.00	12.00	13.00	14.00	11.00		2,500	25
Lead (total)	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		1,000	5
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		20	0.2
Molybdenum	6010	<0.50	<0.50	<0.50	<0.50	2.00	<0.50	1.70	<0.50		3,500	350
Nickel	6010	18.00	14.00	10.00	15.00	23.00	14.00	19.00	15.00		2,000	20
Selenium	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		100	1
Silver	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		500	5
Thallium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00		700	7
Vanadium	6010	35.00	29.00	36.00	25.00	39.00	32.00	34.00	28.00		2,400	24
Zinc	6010	57.00	65.00	45.00	38.00	47.00	39.00	46.00	35.00		5,000	250
VOCs (1) (µg/kg)												
1,1-Dichloroethane	8260	13.00	9.20	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50			
Tetrachloroethene	8260	25.00	5.10	4.40	19.00	<2.50	6.40	2.50	<2.50			
1,1,2-Trichloroethane	8260	19.00	10.00	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50			
Trichloroethene	8260	32.00	<2.50	<2.50	25.00	<2.50	<2.50	<2.50	<2.50			
SVOCs (1) (µg/kg)												
Bis (2-ethylhexyl)Phthalate	8270	120.00	<100.00	<100.00	120.00	<100.00	1,500.00	<100.00	<100.00			
Carbon Chain Range (mg/kg)												
8015m		--	--	--	--	--	--	--	--			
PCBs (µg/kg)												
8080		--	--	ND	--	--	--	--	--			

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

mg/L = milligrams per liter

VOCs = Volatile Organic Compounds

SVOCs = Semi-volatile Organic Compounds

-- = not analyzed

bgs = below ground surface

ND = none detected

TRPH = Total Recoverable Petroleum Hydrocarbons

PCBs = polychlorinated biphenyls

TTLC = California Total Threshold Limit Concentration

STLC = California Soluble Threshold Limit Concentration

(1) VOCs and SVOCs not listed were not detected

(2) Waste Extraction Test performed on this sample. Result was 0.30 mg/L.

(3) TCLP analysis performed on this sample. Result was <0.1 mg/L.

* Refer to Figure 15 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 14
Analytical Data Summary
Remedial Excavation B36-RE-1 Confirmation Samples
Page 1 of 4

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels	
		B36-GS-3-10' 9/17/97 E-38A @ 10' bgs*	B36-GS-4-12' 9/17/97 E-39 @ 12' bgs*	B36-GS-5-12' 9/17/97 E-38B @ 12' bgs*	B36-GS-6-5' 9/17/97 E-40 @ 5' bgs*	B36-GS-7-10' 9/17/97 F-38A @ 10' bgs*	B36-GS-8-12' 9/17/97 F-38B @ 12' bgs*		
TRPH (mg/kg)	418.1	<8.00	<8.00	<8.00	230.00	<8.00	<8.00		
Title 22 Metals (mg/kg)									
Antimony	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	TTLC (mg/kg)	STLC (mg/L)
Arsenic	6010	<1.00	9.40	<1.00	<1.00	<1.00	<1.00	500	15
Barium	6010	180.00	92.00	110.00	86.00	120.00	100.00	500	5
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	10,000	100
Cadmium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	75	0.75
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	100	1
Chromium (total)	6010	26.00	31.00	39.00	21.00	29.00	29.00	500	5
Cobalt	6010	7.70	9.70	9.90	6.60	8.90	8.90	2,500	5 **
Copper	6010	11.00	18.00	22.00	11.00	16.00	16.00	8,000	80
Lead (total)	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2,500	25
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1,000	5
Molybdenum	6010	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	20	0.2
Nickel	6010	13.00	17.00	18.00	9.00	15.00	16.00	3,500	350
Selenium	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2,000	20
Silver	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100	1
Thallium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	500	5
Vanadium	6010	26.00	30.00	39.00	22.00	29.00	27.00	700	7
Zinc	6010	43.00	52.00	58.00	33.00	49.00	46.00	2,400	24
VOCs (1) (µg/kg)									5,000 250
1,1-Dichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50		
Tetrachloroethene	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50		
1,1,1-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50		
1,1,2-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50		
Trichloroethene	8260	<2.50	<2.50	3.70	<2.50	<2.50	2.90		
cis-1,2-Dichloroethene	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50		
SVOCs (1) (µg/kg)									
Bis (2-ethylhexyl)Phthalate	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00		
Chrysene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00		
Fluoranthene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00		
Pyrene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00		
Carbon Chain Range (mg/kg)									
8015m		--	--	--	--	--	--		
PCBs (1) (µg/kg)									
PCB-1254	8080	--	--	--	120.00	--	--		
PCB-1260	8080	--	--	--	<20.00	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram

mg/L = milligrams per liter
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons
-- = not analyzed
bgs = below ground surface
ND = none detected

PCBs = polychlorinated biphenyls
(1) VOCs, SVOCs, and PCBs not listed were not detected
TTLC = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration

* Refer to Figure 16 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 14
Analytical Data Summary
Remedial Excavation B36-RE-1 Confirmation Samples
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Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels TTL (mg/kg) STL (mg/L)
		B36-GS-9-12' 9/17/97 F-39 @ 12' bgs*	B36-GS-10-10' 9/17/97 G-38A @ 10' bgs*	B36-GS-11-12' 9/17/97 G-38B @ 12' bgs*	B36-GS-12-5' 9/17/97 F-40 @ 5' bgs*	B36-GS-13-12' 9/17/97 G-39 @ 12' bgs*	B36-GS-14-5' 9/17/97 G-40 @ 5' bgs*	
TRPH (mg/kg)	418.1	<8.00	<8.00	<8.00	110.00	<8.00	110.00	
Title 22 Metals (mg/kg)								
Antimony	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	500 15
Arsenic	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	500 5
Barium	6010	100.00	110.00	320.00	89.00	120.00	83.00	10,000 100
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	75 0.75
Cadmium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100 1
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	500 5
Chromium (total)	6010	28.00	32.00	30.00	23.00	33.00	18.00	2,500 5 **
Cobalt	6010	8.60	9.60	8.70	8.10	9.90	6.20	8,000 80
Copper	6010	16.00	17.00	18.00	10.00	18.00	8.30	2,500 25
Lead (total)	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,000 5
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	20 0.2
Molybdenum	6010	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3,500 350
Nickel	6010	16.00	14.00	16.00	10.00	16.00	7.40	2,000 20
Selenium	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	100 1
Silver	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	500 5
Thallium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	700 7
Vanadium	6010	21.00	31.00	27.00	25.00	29.00	20.00	2,400 24
Zinc	6010	48.00	52.00	48.00	34.00	49.00	28.00	5,000 250
VOCs (1) (µg/kg)								
1,1-Dichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	
Tetrachloroethene	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	
1,1,1-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	
1,1,2-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	
Trichloroethene	8260	3.70	4.00	4.00	<2.50	7.20	3.00	
cis-1,2-Dichloroethene	8260	<2.50	<2.50	<2.50	<2.50	4.30	<2.50	
SVOCs (1) (µg/kg)								
Bis (2-ethylhexyl)Phthalate	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00	
Chrysene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00	
Fluoranthene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00	
Pyrene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00	
Carbon Chain Range (mg/kg)								
8015m	8015m	--	--	--	--	--	--	
PCBs (1) (µg/kg)								
PCB-1254	8080	--	--	--	--	--	--	
PCB-1260	8080	--	--	--	--	--	--	

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram

mg/L = milligrams per liter
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons
-- = not analyzed
bgs = below ground surface
ND = none detected

PCBs = polychlorinated biphenyls
(1) VOCs, SVOCs, and PCBs not listed were not detected
TTL = California Total Threshold Limit Concentration
STL = California Soluble Threshold Limit Concentration

* Refer to Figure 16 for sample locations

** STL is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 14
Analytical Data Summary
Remedial Excavation B36-RE-1 Confirmation Samples
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Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth						Regulatory Levels	
		B36-GS-15-10' 9/17/97 H-38A @ 10' bgs*	B36-GS-16-12' 9/17/97 H-38B @ 12' bgs*	B36-GS-17-12' 9/17/97 H-39 @ 12' bgs*	B36-GS-18-5' 9/17/97 H-40 @ 5' bgs*	B36-GS-19-2' 9/17/97 J-40 @ 2' bgs*	B36-GS-20-2' 9/17/97 J-39 @ 2' bgs*		
TRPH (mg/kg)	418.1	<8.00	<8.00	<8.00	28.00	35.00	200.00	TTLc	STLC
								(mg/kg)	(mg/L)
Title 22 Metals (mg/kg)									
Antimony	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	500	15
Arsenic	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	500	5
Barium	6010	97.00	110.00	130.00	100.00	89.00	79.00	10,000	100
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	75	0.75
Cadmium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	100	1
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	500	5
Chromium (total)	6010	30.00	30.00	32.00	26.00	21.00	17.00	2,500	5 **
Cobalt	6010	7.10	7.90	10.00	7.90	7.10	7.50	8,000	80
Copper	6010	12.00	18.00	21.00	11.00	8.50	7.30	2,500	25
Lead (total)	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,000	5
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3,500	350
Nickel	6010	12.00	15.00	16.00	10.00	7.80	8.20	2,000	20
Selenium	6010	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	100	1
Silver	6010	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	500	5
Thallium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	700	7
Vanadium	6010	31.00	29.00	33.00	28.00	23.00	15.00	2,400	24
Zinc	6010	43.00	44.00	51.00	36.00	38.00	22.00	5,000	250
VOCs (1) (µg/kg)									
1,1-Dichloroethane	8260	<2.50	<2.50	<2.50	<2.50	3.70	<2.50		
Tetrachloroethene	8260	<2.50	<2.50	<2.50	<2.50	7.70	<2.50		
1,1,1-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50	130.00	<2.50		
1,1,2-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50	32.00	<2.50		
Trichloroethene	8260	<2.50	<2.50	3.30	<2.50	10.00	6.40		
cis-1,2-Dichloroethene	8260	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50		
SVOCs (1) (µg/kg)									
Bis (2-ethylhexyl)Phthalate	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00		
Chrysene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00		
Fluoranthene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00		
Pyrene	8270	<100.00	<100.00	<100.00	<100.00	<100.00	<100.00		
Carbon Chain Range (mg/kg)	8015m	--	--	--	--	--	--		
PCBs (1) (µg/kg)									
PCB-1254	8080	--	--	--	--	--	--		
PCB-1260	8080	--	--	--	--	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram

mg/L = milligrams per liter
VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons
-- = not analyzed
bgs = below ground surface
ND = none detected

PCBs = polychlorinated biphenyls
(1) VOCs, SVOCs, and PCBs not listed were not detected
TTLc = California Total Threshold Limit Concentration
STLC = California Soluble Threshold Limit Concentration

* Refer to Figure 16 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 14
Analytical Data Summary
Remedial Excavation B36-RE-1 Confirmation Samples
Page 4 of 4

Analyte	EPA Method	Sample Number, Collection Date, Grid Location and Depth					Regulatory Levels
		B36-GS-21-2' 9/17/97 J-38B @ 2' bgs*	B36-GS-22-3' 9/17/97 J-38A @ 3' bgs*	B36-GS-23-4' 9/17/97 D-39 @ 4' bgs*	B36-GS-24-5' 9/17/97 D-38B @ 5' bgs*	B36-GS-25-5' 9/17/97 D-38A @ 5' bgs*	
TRPH (mg/kg)	418.1	68.00	19.00	180.00	240.00	540.00	TTLc (mg/kg) STLC (mg/L)
Title 22 Metals (mg/kg)							
Antimony	6010	<5.00	<5.00	<5.00	<5.00	<5.00	500 15
Arsenic	6010	<1.00	<1.00	<1.00	<1.00	17.00 #	500 5
Barium	6010	110.00	85.00	78.00	87.00	80.00	10,000 100
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	75 0.75
Cadmium	6010	<0.10	<0.10	<0.10	<0.10	<0.10	100 1
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	<0.50	500 5
Chromium (total)	6010	28.00	23.00	23.00	23.00	23.00	2,500 5 **
Cobalt	6010	9.60	7.00	6.30	7.00	6.50	8,000 80
Copper	6010	12.00	7.30	9.70	11.00	11.00	2,500 25
Lead (total)	6010	<1.00	<1.00	<1.00	<1.00	7.40	1,000 5
Mercury	7471	<0.01	<0.01	<0.01	<0.01	<0.01	20 0.2
Molybdenum	6010	<0.50	<0.50	<0.50	<0.50	<0.50	3,500 350
Nickel	6010	14.00	6.70	9.30	9.40	10.00	2,000 20
Selenium	6010	<1.00	<1.00	<1.00	<1.00	<1.00	100 1
Silver	6010	<0.10	<0.10	<0.10	<0.10	<0.10	500 5
Thallium	6010	<5.00	<5.00	<5.00	<5.00	<5.00	700 7
Vanadium	6010	24.00	26.00	24.00	23.00	24.00	2,400 24
Zinc	6010	45.00	34.00	31.00	35.00	57.00	5,000 250
VOCs (1) (ug/kg)							
1,1-Dichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	
Tetrachloroethene	8260	<2.50	<2.50	<2.50	<2.50	<2.50	
1,1,1-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	
1,1,2-Trichloroethane	8260	<2.50	<2.50	<2.50	<2.50	<2.50	
Trichloroethene	8260	<2.50	<2.50	<2.50	<2.50	<2.50	
cis-1,2-Dichloroethene	8260	<2.50	<2.50	<2.50	<2.50	<2.50	
SVOCs (1) (ug/kg)							
Bis (2-ethylhexyl)Phthalate	8270	<100.00	<100.00	<100.00	830.00	<200.00	
Chrysene	8270	<100.00	<100.00	<100.00	<100.00	280.00	
Fluoranthene	8270	<100.00	<100.00	<100.00	<100.00	270.00	
Pyrene	8270	<100.00	<100.00	<100.00	<100.00	320.00	
Carbon Chain Range (mg/kg)							
	8015m	--	--	--	--	--	
PCBs (1) (ug/kg)							
PCB-1254	8080	--	--	--	--	<20.00	
PCB-1260	8080	--	--	--	--	26.00	

mg/kg = milligrams per kilogram
 ug/kg = micrograms per kilogram

mg/L = milligrams per liter
 VOCs = Volatile Organic Compounds
 SVOCs = Semi-volatile Organic Compounds

TRPH = Total Recoverable Petroleum Hydrocarbons
 -- = not analyzed
 bgs = below ground surface
 ND = none detected

PCBs = polychlorinated biphenyls
 (1) VOCs, SVOCs, and PCBs not listed were not detected
 TTLc = California Total Threshold Limit Concentration
 STLC = California Soluble Threshold Limit Concentration
 # = Exceeds Screening Value

* Refer to Figure 16 for sample locations

** STLC is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 15
Analytical Data Summary
Remedial Excavation B37CL-RE-1 Confirmation Samples

		Sample Number, Collection Date, Grid Location and Depth					
		B37C1-GS-8-6' 12/17/97 A/A.1-20 @ 6' bgs*	B37C2-GS-7-6' 12/17/97 A.2-21.5 @ 6' bgs*	B37C2-GS-8-6' 12/17/97 A.1-21.5 @ 6' bgs*	B37C3-GS-5-12' 12/18/97 A.1/A.2-18.5 @ 12' bgs*		
Analyte	EPA Method						
TRPH (mg/kg)	418.1	--	--	--	19.00	Regulatory Levels	
						TTLc (mg/kg)	STLc (mg/L)
Title 22 Metals (mg/kg)							
Antimony	6010	<5.00	<5.00	<5.00	<5.00	500	15
Arsenic	6010	<1.00	1.10	1.10	1.20	500	5
Barium	6010	78.00	96.00	64.00	98.00	10,000	100
Beryllium	6010	<0.10	<0.10	<0.10	<0.10	75	0.75
Cadmium	6010	0.32	0.14	0.13	0.30	100	1
Chromium (VI)	7196	<0.50	<0.50	<0.50	<0.50	500	5
Chromium (total)	6010	12.00	15.00	14.00	17.00	2,500	5 **
Cobalt	6010	5.30	8.20	8.20	7.60	8,000	80
Copper	6010	15.00	15.00	16.00	24.00	2,500	25
Lead (total)	6010	1.90	2.50	2.00	3.10	1,000	5
Mercury	7471	<0.01	<0.01	<0.01	<0.01	20	0.2
Molybdenum	6010	<0.50	<0.50	<0.50	<0.50	3,500	350
Nickel	6010	9.30	8.70	8.50	13.00	2,000	20
Selenium	6010	<1.00	<1.00	<1.00	<1.00	100	1
Silver	6010	<0.10	<0.10	<0.10	<0.10	500	5
Thallium	6010	<5.00	<5.00	<5.00	<5.00	700	7
Vanadium	6010	19.00	28.00	32.00	27.00	2,400	24
Zinc	6010	48.00	39.00	46.00	45.00	5,000	250
VOCs (1) (µg/kg)							
1,2,4-Trimethylbenzene	8260	--	--	--	70.00		
p-Isopropyltoluene	8260	--	--	--	28.00		
Naphthalene	8260	--	--	--	240.00		
SVOCs (µg/kg)	8270	--	--	--	ND		
Carbon Chain Range (mg/kg)	8015m	--	--	--	--		
PCBs (µg/kg)	8080	--	--	--	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
PCBs = polychlorinated biphenyls
bgs = below ground surface
ND = none detected

TRPH = Total Recoverable Petroleum Hydrocarbons
(1) VOCs not listed were not detected
TTL = California Total Threshold Limit Concentration
STL = California Soluble Threshold Limit Concentration

* Refer to Figure 17 for sample locations

** STL is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 16
Analytical Data Summary
Remedial Excavation PL-RE-1 Confirmation Sample

Analyte		Sample Number, Collection Date, Grid Location and Depth			
		PL-GS-19-9'		12/12/97	
		A.1/A.2-10.5 @ 9' bgs*			
EPA Method					
TRPH (mg/kg)		418.1	<8.00	Regulatory Levels	
				TTL	STL
Title 22 Metals (mg/kg)				(mg/kg)	(mg/L)
Antimony	6010		<5.00	500	15
Arsenic	6010		<1.00	500	5
Barium	6010		18.00	10,000	100
Beryllium	6010		<0.10	75	0.75
Cadmium	6010		<0.10	100	1
Chromium (VI)	7196		<0.50	500	5
Chromium (total)	6010		4.90	2,500	5 **
Cobalt	6010		1.90	8,000	80
Copper	6010		5.80	2,500	25
Lead (total)	6010		<1.00	1,000	5
Mercury	7471		<0.01	20	0.2
Molybdenum	6010		<0.50	3,500	350
Nickel	6010		3.30	2,000	20
Selenium	6010		<1.00	100	1
Silver	6010		<0.10	500	5
Thallium	6010		<5.00	700	7
Vanadium	6010		8.30	2,400	24
Zinc	6010		21.00	5,000	250
VOCs (µg/kg)		8260	ND		
SVOCs (1) (µg/kg)					
bis (2-Ethylhexyl)Phthalate	8270		1,000.00		
Carbon Chain Range (mg/kg)		8015m	--		
PCBs (µg/kg)		8080	--		

mg/kg = milligrams per kilogram
µg/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = not analyzed
bgs = below ground surface
ND = none detected

VOCs = Volatile Organic Compounds
SVOCs = Semi-volatile Organic Compounds
PCBs = polychlorinated biphenyls
TRPH = Total Recoverable Petroleum Hydrocarbons
(1) SVOCs not listed were not detected
TTL = California Total Threshold Limit Concentration
STL = California Soluble Threshold Limit Concentration

* Refer to Figure 18 for sample location

** STL is 560 mg/L when TCLP is performed and result is less than 5 mg/L per CCR Title 22.

NOTE: Site-Specific Health-Based Soil Screening Values Presented in Table 17 are Reported in mg/kg

TABLE 17
Site-Specific Health-Based Soil Screening Values for
Organic Constituents Soil Exposure Pathways (mg/kg)
Page 1 of 5

Constituent	Construction Worker Initial Value	Commercial/ Industrial User Initial Value	Final Value
1-butanol	1.98E+04	3.46E+04	1.98E+04
1,1-dichloroethane	2.23E+03	1.10E+03	1.10E+03
1,1-dichloroethene	1.57E+01	4.21E+00	4.21E+00
1,1,1,2-tetrachloroethane	4.98E+02	1.44E+04	4.98E+02
1,1,2-trichloroethane	2.23E+02	1.26E+03	2.23E+02
1,1,2,2-tetrachloroethane	6.25E+01	1.50E+03	6.25E+01
1,2-dibromo-3-chloropropane	2.42E+00	7.47E+01	2.42E+00
1,2-dibromoethane	4.86E+00	1.84E+02	4.86E+00
1,2-dichlorobenzene	NA	2.64E+06	2.64E+06
1,2-dichloroethane	2.06E+02	2.66E+02	2.06E+02
1,2-dichloropropane	3.37E+01	7.25E+00	7.25E+00
1,2-diphenylhydrazine	2.03E+01	2.36E+08	2.03E+01
1,2,3-trichloropropane	2.39E+00	4.08E+01	2.39E+00
1,2,4-trichlorobenzene	1.74E+02	4.74E+07	1.74E+02
1,3-dichloropropene	4.83E+01	6.63E+02	4.83E+01
1,4-dichlorobenzene	4.32E+02	4.37E+04	4.32E+02
2-butanone	3.28E+04	2.35E+06	3.28E+04
2-chlorophenol	8.57E+02	1.17E+06	8.57E+02
2-methylphenol	8.66E+03	7.59E+07	8.66E+03
2-naphthylamine	9.81E+00	1.63E+06	9.81E+00
2,4-dichlorophenol	5.21E+01	2.22E+07	5.21E+01
2,4-dimethylphenol	3.48E+03	4.37E+08	3.48E+03
2,4-dinitrophenol	3.49E+01	7.14E+09	3.49E+01
2,4-dinitrotoluene	3.48E+01	7.62E+06	3.48E+01
2,4,5-trichlorophenol	1.73E+04	2.21E+08	1.73E+04
2,4,6-trichlorophenol	2.52E+02	1.10E+07	2.52E+02
2,6-dinitrotoluene	2.59E+01	4.51E+05	2.59E+01
3,3-dichlorobenzidine	1.47E+01	7.53E+08	1.47E+01
4-chloroaniline	6.93E+01	6.50E+06	6.93E+01
4-methyl-2-pentanone	1.20E+04	6.84E+05	1.20E+04
4-methylphenol	8.69E+01	4.01E+07	8.69E+01
4,4-ddd	1.03E+02	9.97E+08	1.03E+02
4,4-dde	7.28E+01	2.83E+06	7.28E+01
4,4-ddt	1.22E+01	2.26E+08	1.22E+01
acenaphthene	8.10E+03	1.62E+08	8.10E+03
acetone	1.55E+04	4.37E+05	1.55E+04
acrolein	NA	8.05E+01	8.05E+01
acrylonitrile	1.59E+01	7.65E+01	1.59E+01

TABLE 17
Site-Specific Health-Based Soil Screening Values for
Organic Constituents Soil Exposure Pathways (mg/kg)
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Constituent	Construction Worker Initial Value	Commercial/ Industrial User Initial Value	Final Value
aldrin	7.32E-01	2.82E+04	7.32E-01
alpha-bhc	3.93E+00	2.32E+05	3.93E+00
aniline	3.10E+03	1.02E+07	3.10E+03
anthracene	4.06E+03	1.37E+10	4.06E+03
aroclor 1016	NA	7.35E+05	7.35E+05
aroclor 1254	8.70E-01	5.69E+05	8.70E-01
benzene	1.43E+02	1.71E+02	1.43E+02
benzidine	3.52E-02	1.55E+02	3.52E-02
benzoic acid	6.96E+04	6.58E+10	6.96E+04
benzo(a)anthracene	1.14E+01	1.13E+09	1.14E+01
benzo(a)pyrene	1.14E+00	9.56E+07	1.14E+00
benzo(b)fluoranthene	1.14E+01	3.19E+08	1.14E+01
benzo(k)fluoranthene	1.14E+01	9.56E+07	1.14E+01
benzyl alcohol	1.73E+04	3.81E+08	1.73E+04
benzyl chloride	1.00E+02	4.03E+03	1.00E+02
beta-bhc	1.38E+01	9.94E+06	1.38E+01
beta-chloronaphthalene	NA	2.32E+07	2.32E+07
bis(2-chloro-1-methylethyl)ether	2.49E+02	2.93E+04	2.49E+02
bis(2-chloroethyl)ether	6.91E+00	6.91E+02	6.91E+00
bis(2-ethylhexyl)phthalate	2.10E+03	3.59E+09	2.10E+03
bromodichloromethane	1.30E+02	2.94E+03	1.30E+02
bromoform	3.34E+02	1.28E+05	3.34E+02
bromomethane	NA	1.15E+02	1.15E+02
carbazole	8.83E+02	6.66E+08	8.83E+02
carbon disulfide	1.43E+03	7.04E+04	1.43E+03
carbon tetrachloride	9.71E+01	1.35E+02	9.71E+01
chlordane	1.04E+00	1.55E+05	1.04E+00
chlorobenzene	NA	2.83E+04	2.83E+04
chloroform	1.49E+02	9.58E+02	1.49E+02
chloromethane	7.43E+02	7.40E+01	7.40E+01
chrysene	1.14E+02	5.06E+10	1.14E+02
cis-1,2-dichloroethene	1.34E+03	7.51E+03	1.34E+03
cumene	3.79E+03	5.73E+04	3.79E+03
dibenzo(a,h)anthracene	3.35E+00	6.34E+11	3.35E+00
dibromochloromethane	1.50E+02	1.54E+02	1.50E+02
dichlorodifluoromethane	2.14E+03	7.01E+02	7.01E+02
dieldrin	1.22E+00	2.33E+04	1.22E+00
diethyl phthalate	1.39E+05	6.03E+09	1.39E+05
di-n-butylphthalate	1.74E+04	4.19E+08	1.74E+04

TABLE 17
Site-Specific Health-Based Soil Screening Values for
Organic Constituents Soil Exposure Pathways (mg/kg)
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Constituent	Construction Worker Initial Value	Commercial/ Industrial User Initial Value	Final Value
di-n-octylphthalate	3.49E+02	1.80E+10	3.49E+02
endosulfan	1.46E+02	2.14E+08	1.46E+02
endrin	7.33E+00	1.37E+08	7.33E+00
ethyl chloride	1.42E+05	1.57E+06	1.42E+05
ethylbenzene	NA	7.33E+05	7.33E+05
fluoranthene	6.97E+03	3.03E+10	6.97E+03
fluorene	6.94E+03	1.40E+08	6.94E+03
gamma-bhc	2.32E+01	2.63E+05	2.32E+01
heptachlor	2.87E+00	1.78E+03	2.87E+00
heptachlor epoxide	3.14E-01	1.35E+03	3.14E-01
hexachlorobenzene	9.69E+00	2.80E+03	9.69E+00
hexachlorobutadiene	2.24E+02	7.13E+04	2.24E+02
hexachlorocyclopentadiene	8.87E+01	9.79E+02	8.87E+01
hexachloroethane	1.73E+02	2.39E+05	1.73E+02
indeno(1,2,3-cd)pyrene	1.47E+01	1.23E+11	1.47E+01
isobutyl alcohol	4.81E+04	2.55E+06	4.81E+04
isophorone	1.85E+04	2.92E+07	1.85E+04
methoxychlor	8.71E+01	1.48E+09	8.71E+01
methyl methacrylate	1.06E+03	5.56E+04	1.06E+03
methylene bromide	1.51E+03	2.75E+04	1.51E+03
methylene chloride	1.07E+03	1.26E+03	1.07E+03
methyl-tert-butyl ether	NA	1.39E+06	1.39E+06
n-butylbenzyl phthalate	3.48E+03	6.52E+09	3.48E+03
nitroaniline, o-	8.07E+03	2.45E+06	8.07E+03
nitrobenzene	8.61E+01	1.78E+05	8.61E+01
nitrosodiphenylamine, p-	8.02E+02	1.03E+07	8.02E+02
n-nitrosodimethylamine	2.60E-01	1.38E-02	1.38E-02
n-nitroso-di-n-propylamine	2.48E+00	4.46E+02	2.48E+00
n-nitrosodiphenylamine	1.96E+03	4.80E+09	1.96E+03
o-chlorotoluene	3.14E+03	1.05E+05	3.14E+03
p-chloro-m-cresol	3.48E+04	NA	3.48E+04
pentachlorophenol	3.04E+02	3.09E+07	3.04E+02
phenol	1.04E+04	3.14E+09	1.04E+04
pyrene	2.35E+03	4.11E+10	2.35E+03
styrene	3.02E+05	7.58E+06	3.02E+05
tetrachloroethene	3.36E+02	7.52E+03	3.36E+02
toluene	3.12E+04	2.41E+05	3.12E+04
toxaphene	1.47E+01	9.16E+04	1.47E+01
trans-1,2-dichloroethene	2.68E+03	1.47E+04	2.68E+03

TABLE 17
Site-Specific Health-Based Soil Screening Values for
Organic Constituents Soil Exposure Pathways (mg/kg)
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Constituent	Construction Worker Initial Value	Commercial/ Industrial User Initial Value	Final Value
trichloroethene	1.05E+03	1.39E+03	1.05E+03
trichlorofluoromethane	1.03E+04	4.89E+04	1.03E+04
vinyl acetate	5.41E+03	2.31E+05	5.41E+03
vinyl chloride	5.16E+00	1.81E-01	1.81E-01
xlenes	3.26E+04	2.61E+07	3.26E+04

TABLE 17
Site-Specific Health-Based Soil Screening Values for
Inorganic Constituents Soil Exposure Pathways (mg/kg)
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Compound	Initial Value	ILM Background*	Final Value
aluminum	NT	3.63E+04	3.63E+04
antimony	9.05E+00	5.00E+00	9.05E+00
arsenic	8.87E+00	1.40E+01	1.40E+01
barium	2.52E+03	2.81E+02	2.52E+03
beryllium	1.56E+01	7.40E-01	1.56E+01
cadmium	1.64E+01	8.80E-01	1.64E+01
calcium	NT	3.80E+04	3.80E+04
chromium iii	3.22E+04	4.10E+01	3.22E+04
chromium vi	9.73E+01	NA	9.73E+01
cobalt	NT	2.00E+01	2.00E+01
copper	1.26E+03	5.30E+01	1.26E+03
cyanide	6.99E+02	NA	6.99E+02
iron	NT	6.05E+04	6.05E+04
lead	NT	1.11E+02	1.11E+02
mercury	6.78E+00	2.80E-01	6.78E+00
molybdenum	1.24E+03	2.30E+01	1.24E+03
nickel	2.39E+02	2.90E+01	2.39E+02
potassium	NT	8.26E+03	8.26E+03
selenium	1.82E+02	1.24E+03	1.24E+03
silver	1.30E+02	2.39E+02	2.39E+02
sodium	NT	1.96E+03	1.96E+03
thallium	NT	1.10E+01	1.10E+01
titanium	NT	1.95E+03	1.95E+03
vanadium	8.37E+01	8.20E+01	8.37E+01
zinc	8.73E+03	1.98E+02	8.73E+03

NOTES:

*ILM background values provided in Baseline Risk Assessment (G&M 1996).

NT = No Toxicity values available for calculation of HBRG

NA = Not Available.

TABLE 18
Remedial Excavations BA-RE-1, B36-RE-1, B37CL-RE-1, and PL-RE-1
Excavated Soil Disposition Reference

Land Treatment Unit	Sample ID	Screening Criteria Summary*		Soil Location				
		Non-Haz Waste	Non-RCRA Haz Waste	Backfill Area Boundries**				Depth (bgs)
		North	East	South	West			
BA-LTU-1	BA-RE1-SP3 BA-LTU-1-GS-1	X		To Be Disposed Off-Site as Non-Hazardous Waste				
BA-LTU-2	BA-RE1-SP1 BA-RE1-SP1A BA-RE1-SP2 BA-GS-1-1.5' BA-LTU-2-GS-1			To be backfilled				
B36-LTU	B36-RE1-SP1 2BB-36-4-4' B36-RE1-SP3 WL-GS-5-4' B36-RE1-SP4 WL-GS-6-4' B36-RE1-SP2 B36-RE1-SP5 B36LTU-GS-1 B36LTU-GS-2	X		39	A/B	43.5	A.4	10' - 1'
Fill Soil	B37C1-GS-1-3' B37C2-GS-1-3'			Backfilled				
Fill Soil (Section 2)	B37C1-GS-2-10.5'	X		To Be Disposed Off-Site as Non-Hazardous Waste				
B37CL-RE1-A	B37CL-RE1-SP1			10	A.6	11	A.1	8' - 2'
				17	A.9	21	A.6/A.7	1'
				4	A.12	16	A.8	2'
				Additional material to be backfilled				
B37CL-RE1-B	not sampled			10	A.6	11	A.1	8' - 2'
				17	A.9	21	A.6/A.7	1'
				4	A.12	16	A.8	2'
B37CL-LTU-1	B37C1-GS-3-5' B37C1-GS-4-5' B37C1-GS-5-5' B37C1-GS-6-5' B37C1-GS-7-11' B37C2-GS-2-2' B37C2-GS-3-2' B37C2-GS-4-2' B37C2-GS-5-2' B37C2-GS-6-4' B37C3-GS-1-5' B37C3-GS-2-5' B37C3-GS-3-5' B37C3-GS-4-5' B37C3-GS-1A-5' B37C3-GS-2A-5' B37C3-GS-3A-5' B37C3-GS-4A-5' WL-GS-9-4' WL-GS-10-4' B37CL-LTU1-GS-1	X X X X X		4	A.13	18	A.8	5' - 3'
PL-LTU-1	PL-LTU1-GS-1 PL-LTU1-GS-2 PL-LTU1-GS-3			To be backfilled				

* Blank space denotes soil samples which pass all screening criteria.

X Denotes stockpile disposition based on soil sample failing a screening criterion.

bgs = below ground surface

** Refer to Figure 21 for backfill locations